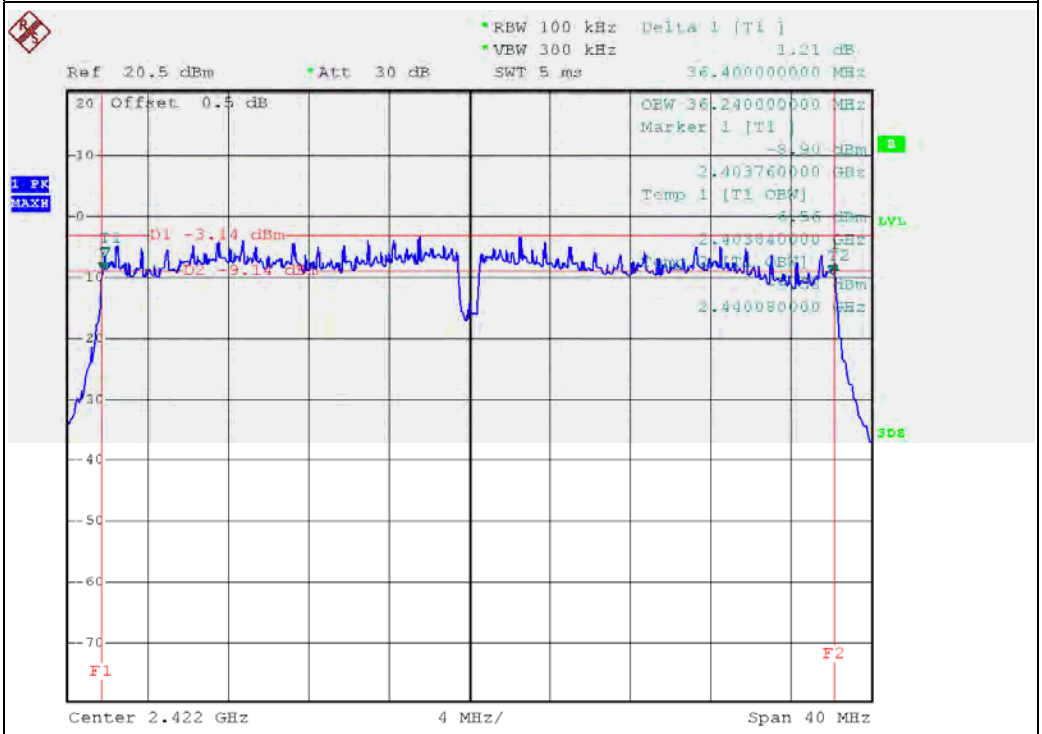
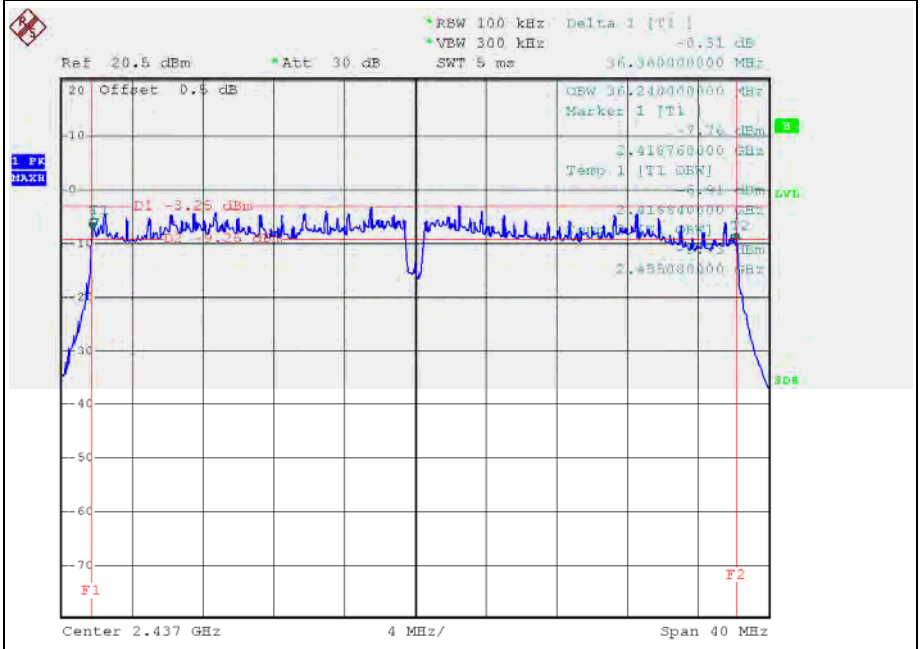
EUT：	Wireless N450 Gigabit Router	Model Name. ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE -40MHz/ CH03, CH06, CH09-ANT 0		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH03	2422	36.40	PASS
CH06	2437	36.36	PASS
CH09	2452	36.48	PASS

TX CH 03

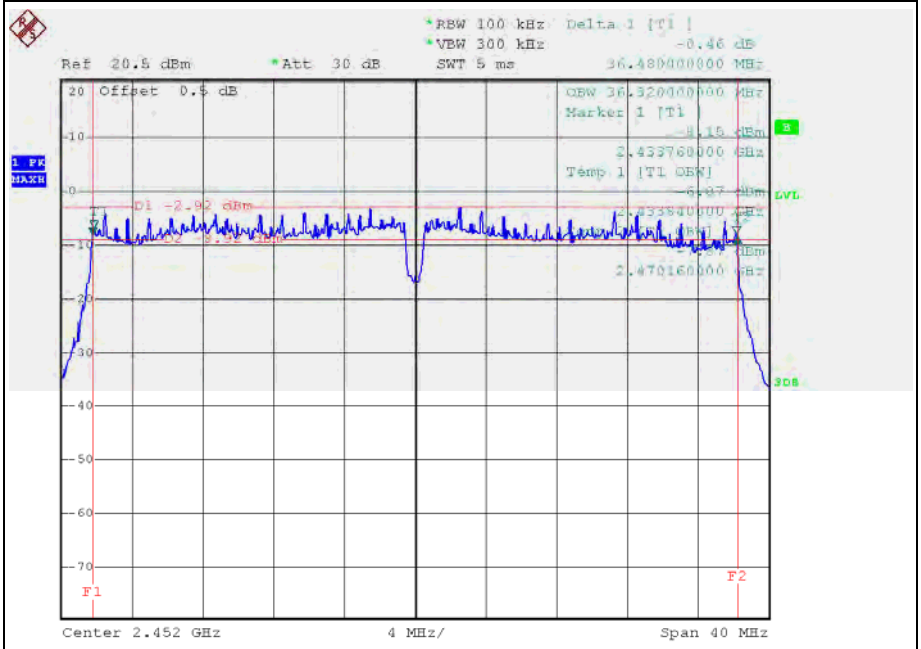


TX CH 06



Date: 3.SEP.2013 20:29:38

TX CH 09

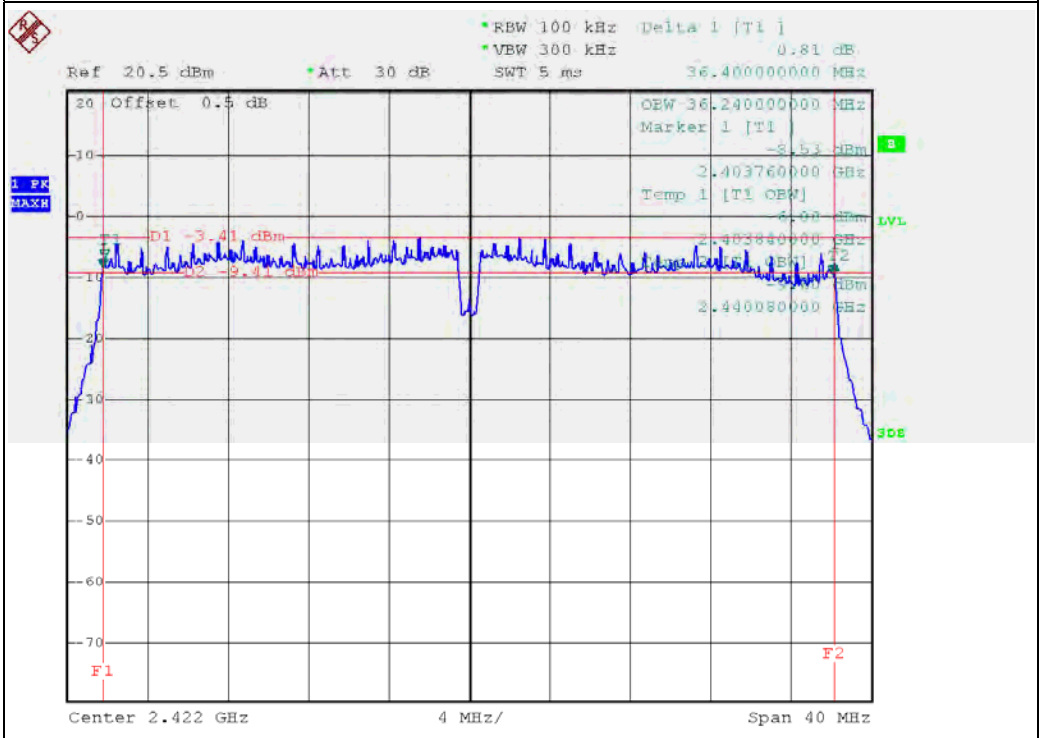


Date: 3.SEP.2013 20:32:00

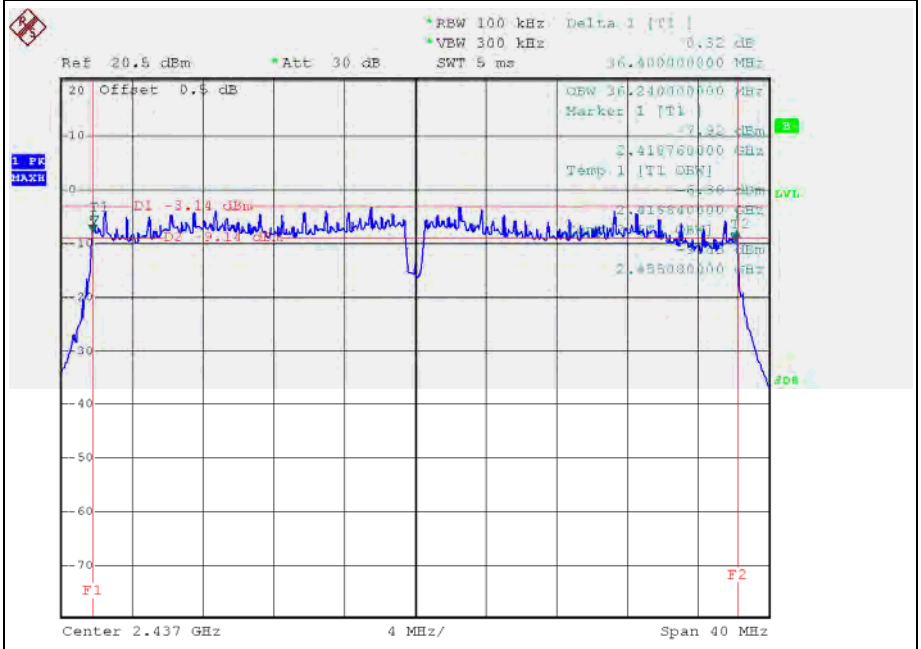
EUT：	Wireless N450 Gigabit Router	Model Name. ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE -40MHz/ CH03, CH06, CH09-ANT 1		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH03	2422	36.40	PASS
CH06	2437	36.40	PASS
CH09	2452	36.48	PASS

TX CH 03

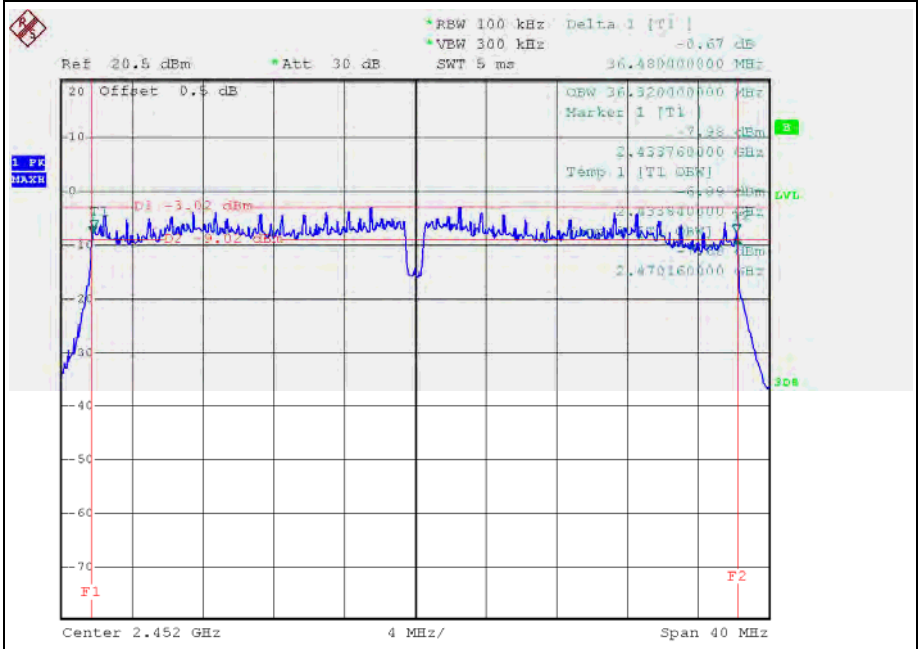


TX CH 06



Date: 3.SEP.2013 20:17:53

TX CH 09

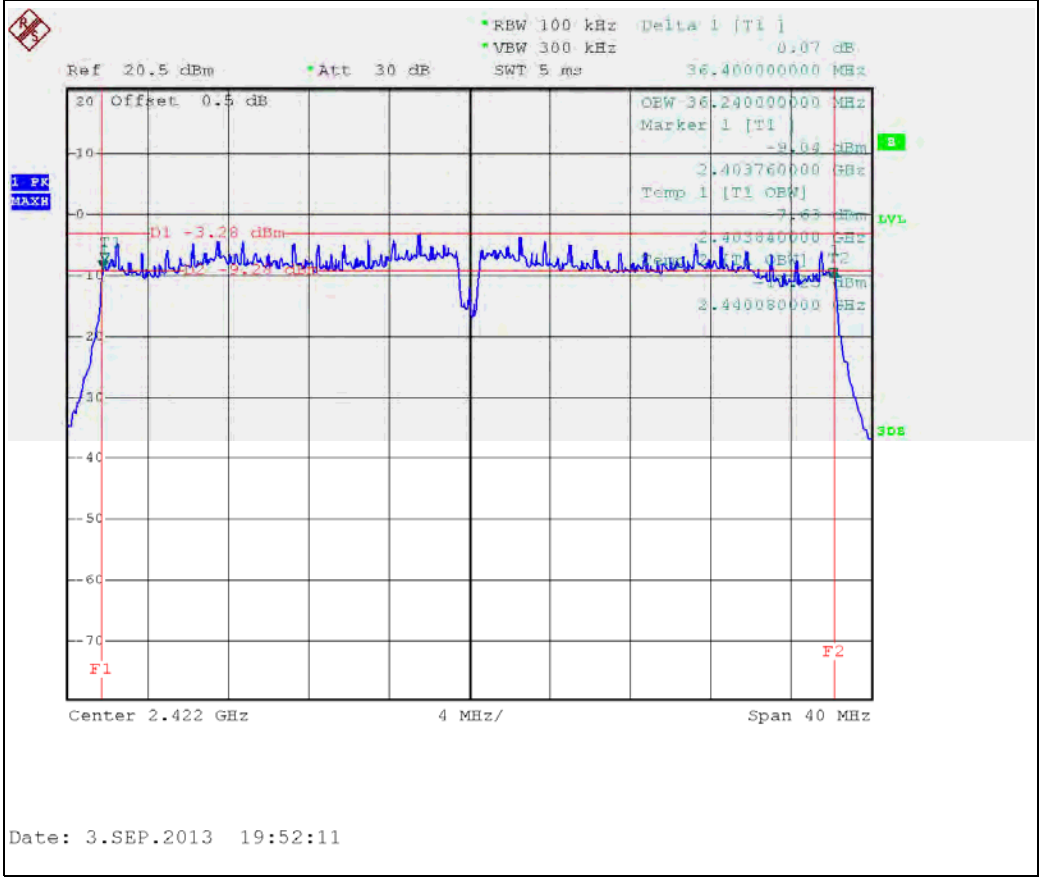


Date: 3.SEP.2013 20:10:21

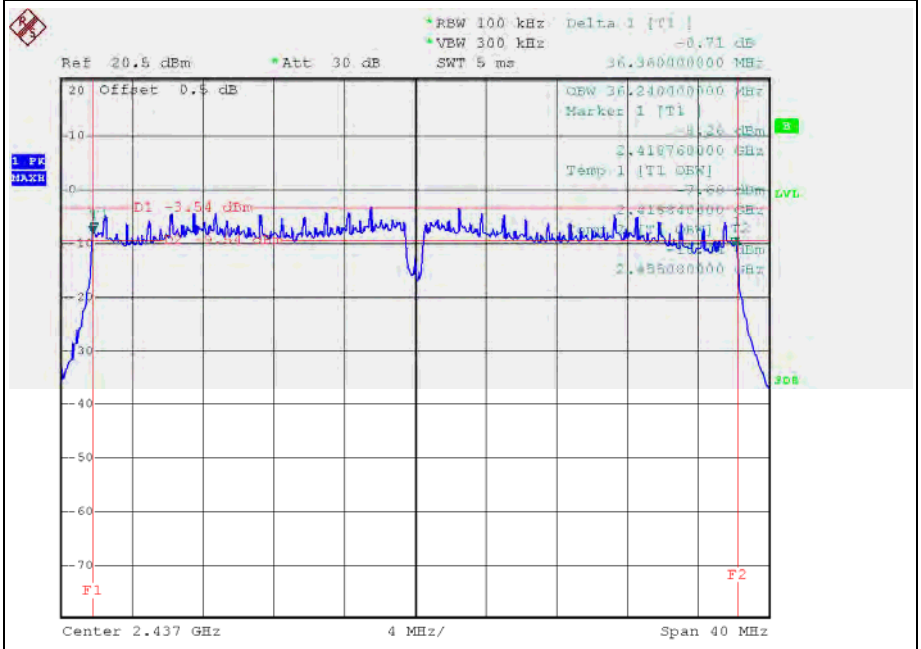
EUT：	Wireless N450 Gigabit Router	Model Name. ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE -40MHz/ CH03, CH06, CH09-ANT 2		

Test Channel	Frequency (MHz)	Bandwidth (MHz)	Result
CH03	2422	36.40	PASS
CH06	2437	36.37	PASS
CH09	2452	36.48	PASS

TX CH 03

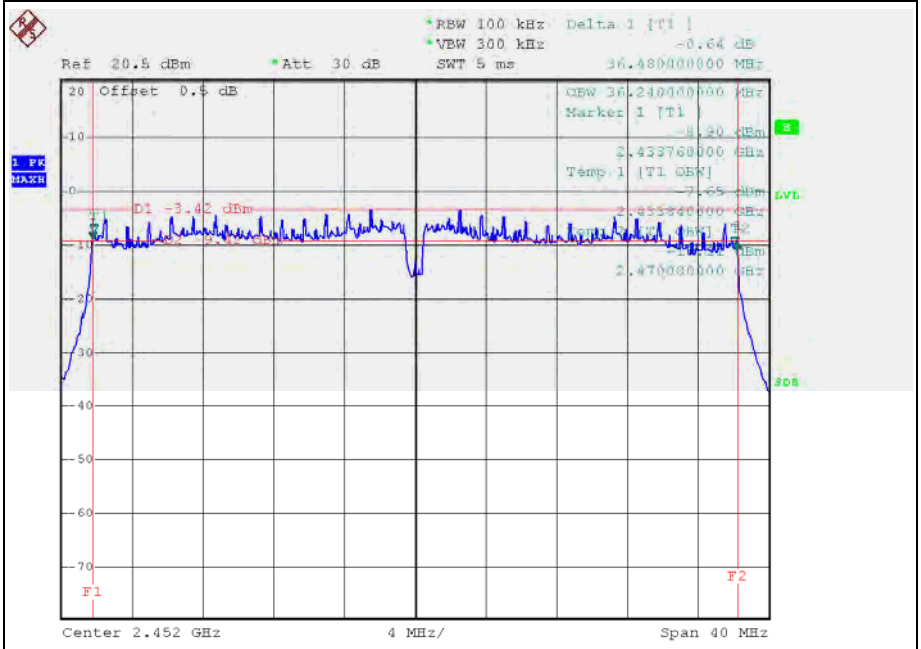


TX CH 06



Date: 3.SEP.2013 19:59:58

TX CH 09



Date: 3.SEP.2013 20:03:56

6. MAXIMUM OUTPUT POWER TEST

6.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(b)(3)	Maximum Output Power	1 watt or 30dBm	2400-2483.5	PASS

6.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	P-series Power meter	Agilent	N1911A	MY45100473	May.04.2013	Apr.25.2014
2	Wireband Power sensor	Agilent	N1921A	MY51100041	May.04.2013	Apr.25.2014

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

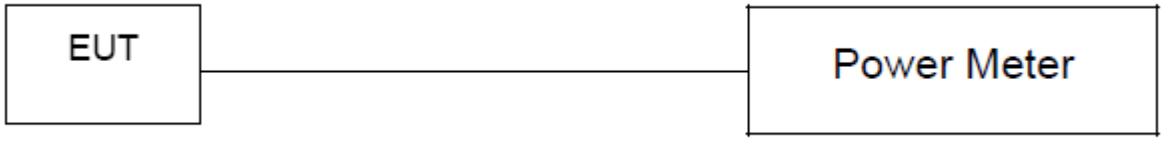
6.1.2 TEST PROCEDURE

a. The EUT was directly connected to the power meter and antenna output port as show in the block diagram below,
b. The maximum peak conducted output power was performed in accordance with method 9.1.3 of FCC KDB 558074

6.1.3 DEVIATION FROM STANDARD

No deviation.

6.1.4 TEST SETUP



6.1.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.
Transmit output power was measured while the host equipment supply voltage was varied from 85 % to 115 % of the nominal rated supply voltage. No change in transmit output power was observed.

6.1.6 TEST RESULTS

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH06, CH11		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	18.23	30	1
2437 MHz	18.55	30	1
2462 MHz	18.69	30	1

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE /CH01, CH06, CH11		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	25.74	30	1
2437 MHz	25.68	30	1
2462 MHz	25.54	30	1

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE /CH01, CH06, CH11-ANT 0		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	22.73	30	1
2437 MHz	22.57	30	1
2462 MHz	22.69	30	1

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE /CH01, CH06, CH11-ANT 1		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	22.53	30	1
2437 MHz	22.05	30	1
2462 MHz	22.22	30	1

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE /CH01, CH06, CH11-ANT 2		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	22.19	30	1
2437 MHz	22.68	30	1
2462 MHz	22.79	30	1

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE /CH01, CH06, CH11-ANT 0+ANT 1+ANT 2		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2412 MHz	27.26	30	1
2437 MHz	27.21	30	1
2462 MHz	27.34	30	1

Note: The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and three receivers (3T3R).all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=5.

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-40M MODE /CH03, CH06, CH09-ANT 0		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2422 MHz	22.64	30	1
2437 MHz	22.73	30	1
2452 MHz	22.56	30	1

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-40M MODE /CH03, CH06, CH09-ANT 1		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2422 MHz	22.11	30	1
2437 MHz	22.80	30	1
2452 MHz	22.32	30	1

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-40M MODE /CH03, CH06, CH09-ANT 2		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2422 MHz	22.02	30	1
2437 MHz	22.35	30	1
2452 MHz	22.53	30	1

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-40M MODE /CH03, CH06, CH09-ANT 0+ANT 1+ANT 2		

Frequency (MHz)	Peak Output Power (dBm)	LIMIT (dBm)	LIMIT (W)
2422 MHz	27.04	30	1
2437 MHz	27.40	30	1
2452 MHz	27.24	30	1

Note: The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and three receivers (3T3R).all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=5.

7. ANTENNA CONDUCTED SPURIOUS EMISSION

7.1 Applied procedures / limit

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
960~1000	500	3

7.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 17.2012	Nov. 16.2013

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

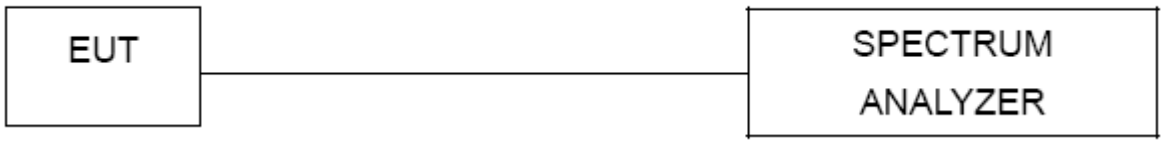
7.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW= 100KHz, VBW=300KHz, Sweep time = Auto.

7.1.3 DEVIATION FROM STANDARD

No deviation.

7.1.4 TEST SETUP



7.1.5 EUT OPERATION CONDITIONS

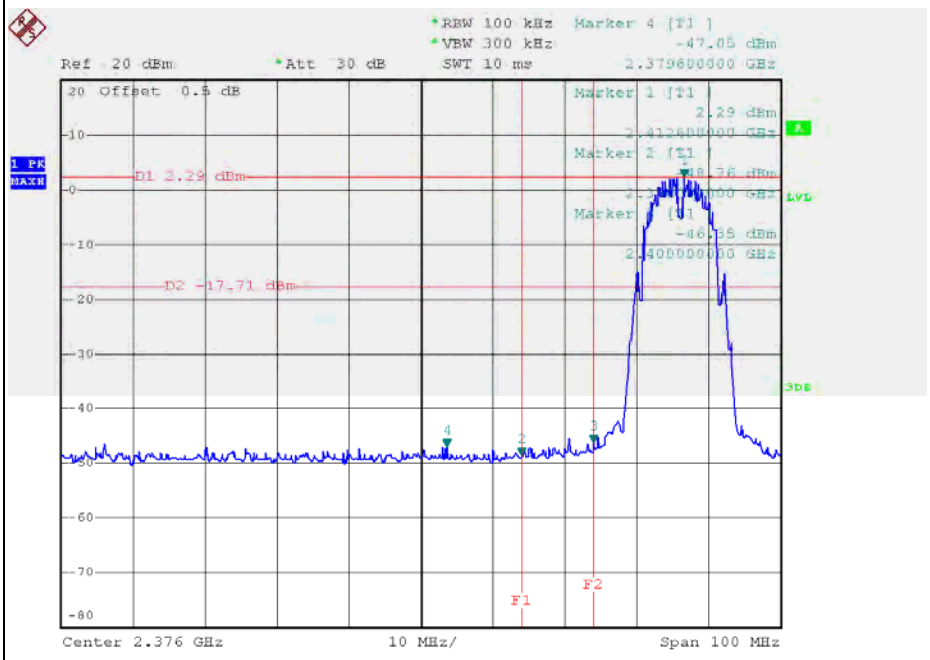
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

7.1.6 TEST RESULTS

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH06 , CH11		

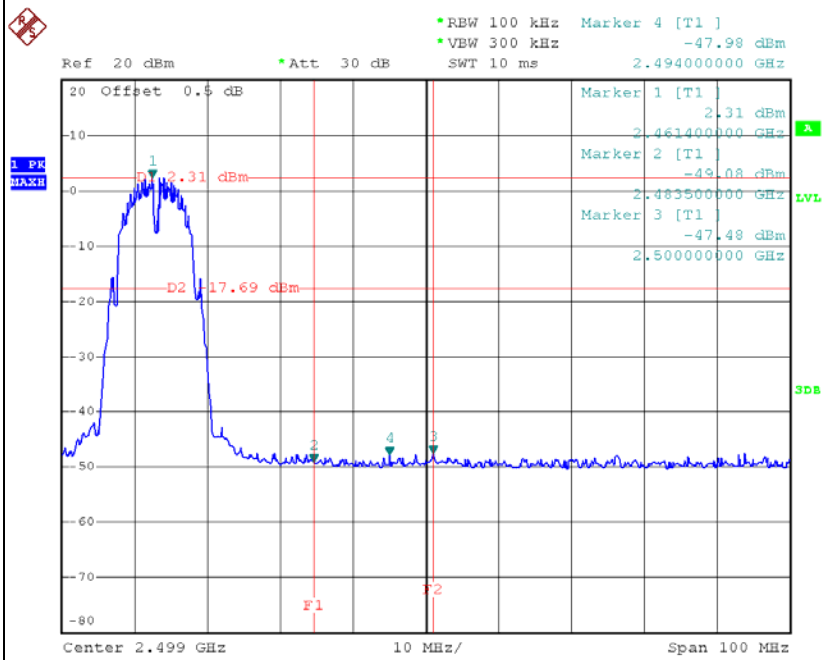
Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2400.00	-46.35	2500.00	-47.48
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX B mode CH01



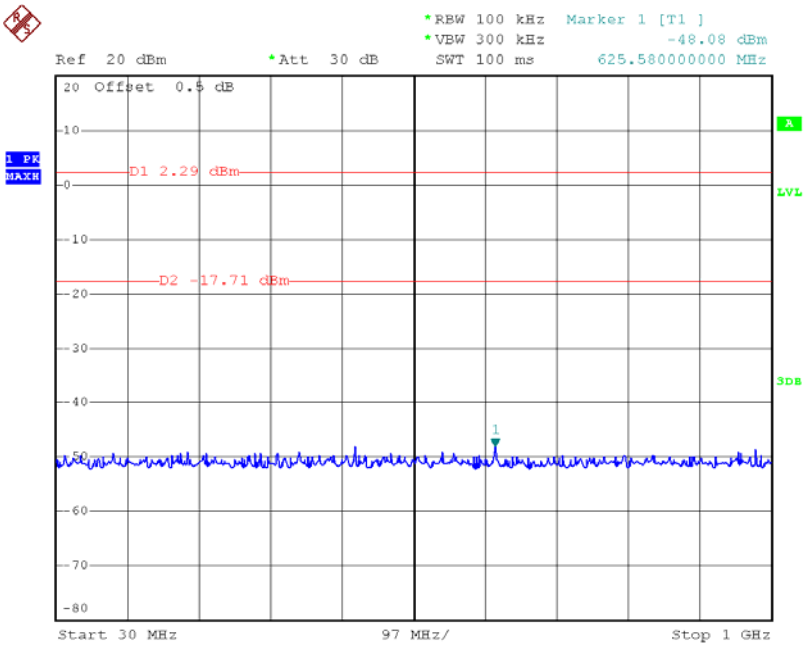
Date: 3.SEP.2013 17:29:02

TX B mode CH11



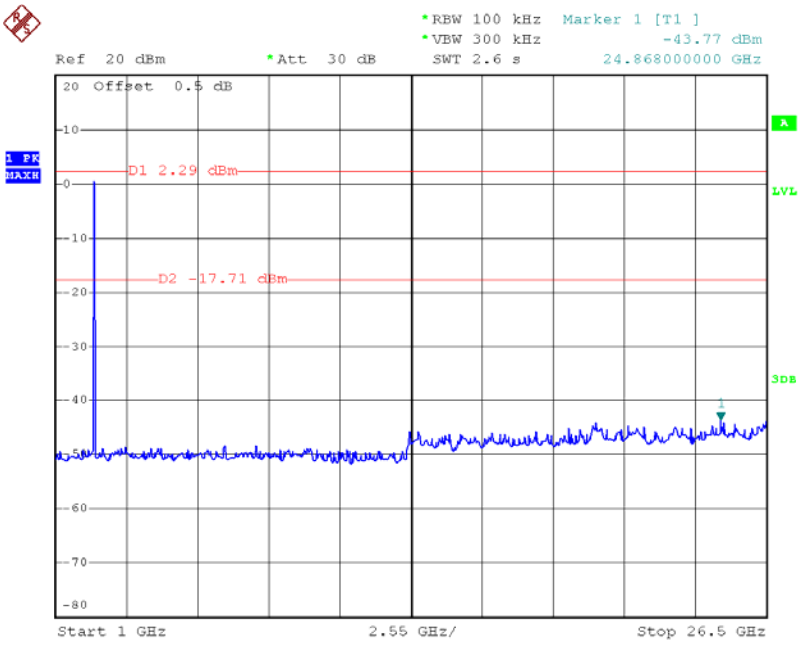
Date: 3.SEP.2013 17:24:42

TX B mode CH01 (30M~1000MHz)



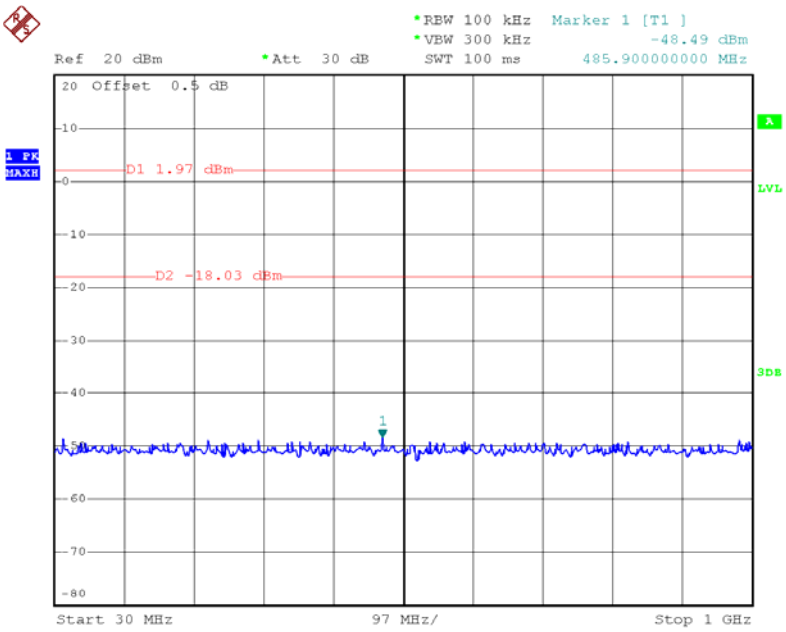
Date: 3.SEP.2013 17:29:26

TX B mode CH01 (1000MHz~10th Harmonic)



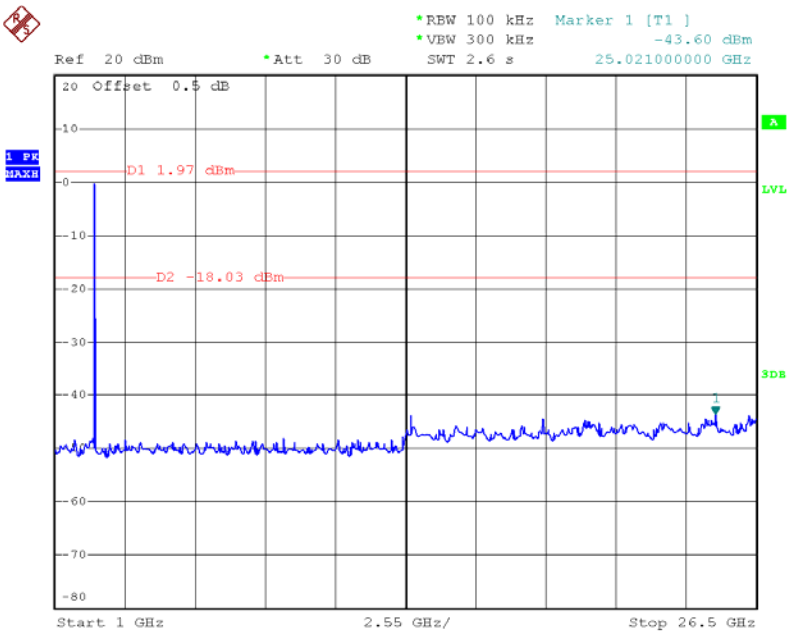
Date: 3.SEP.2013 17:29:39

TX B mode CH06 (30M~1000MHz)



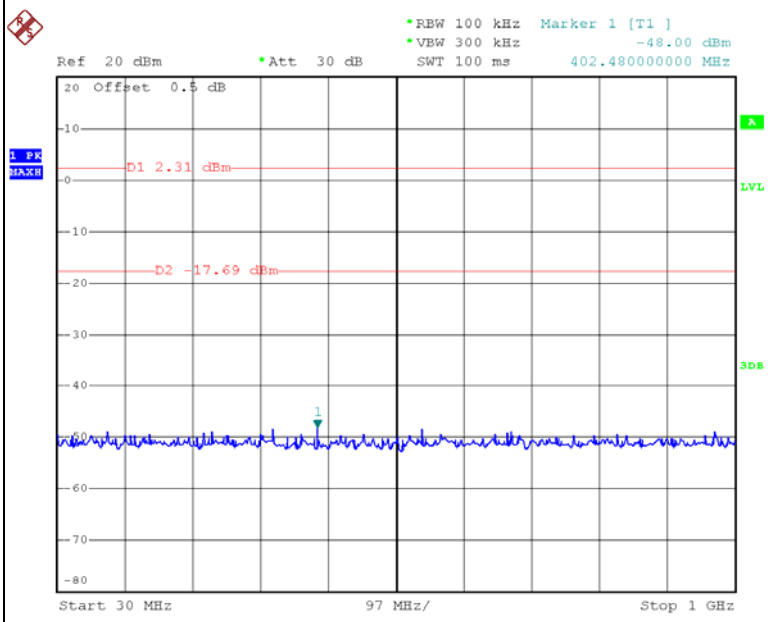
Date: 3.SEP.2013 17:26:56

TX B mode CH06 (1000MHz~10th Harmonic)



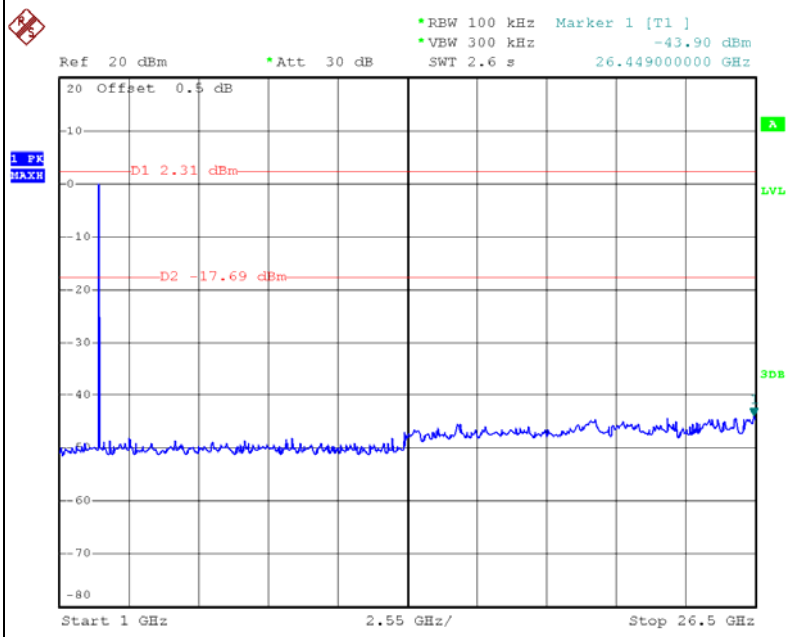
Date: 3.SEP.2013 17:27:12

TX B mode CH11 (30M~1000MHz)



Date: 3.SEP.2013 17:25:17

TX B mode CH11 (1000MHz~10th Harmonic)

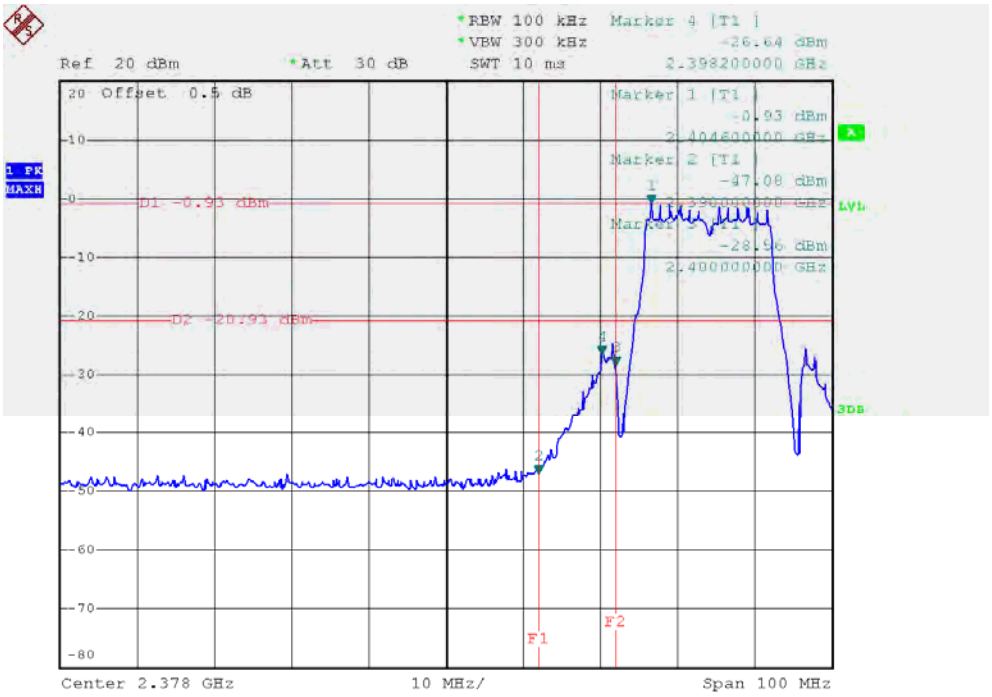


Date: 3.SEP.2013 17:25:32

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE / CH01, CH06 , CH11		

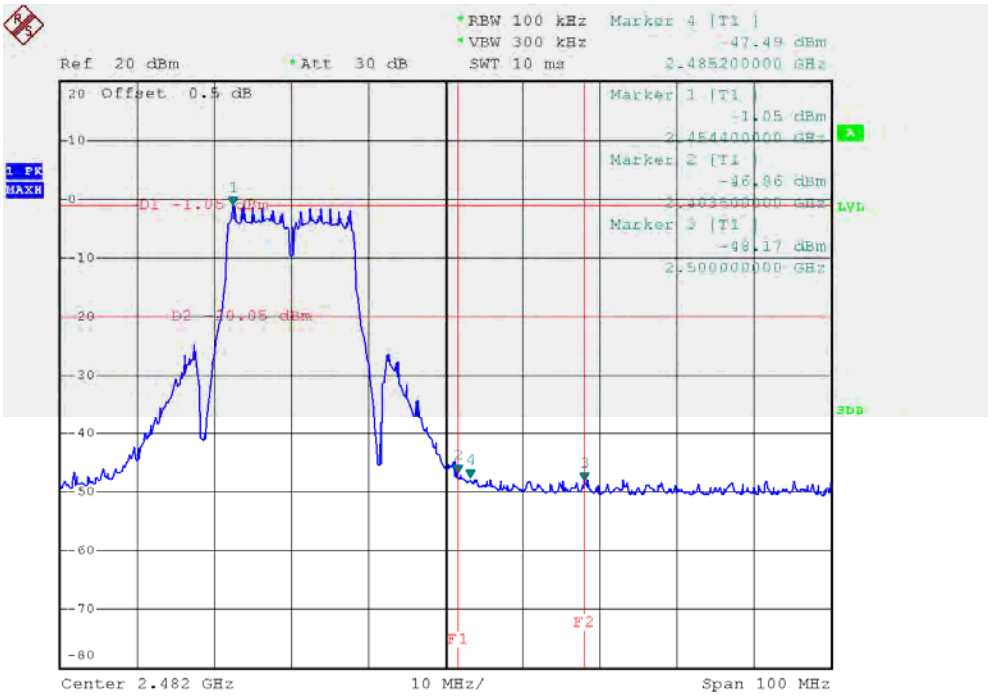
Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2398.20	-26.64	2483.50	-46.86
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX G mode CH01



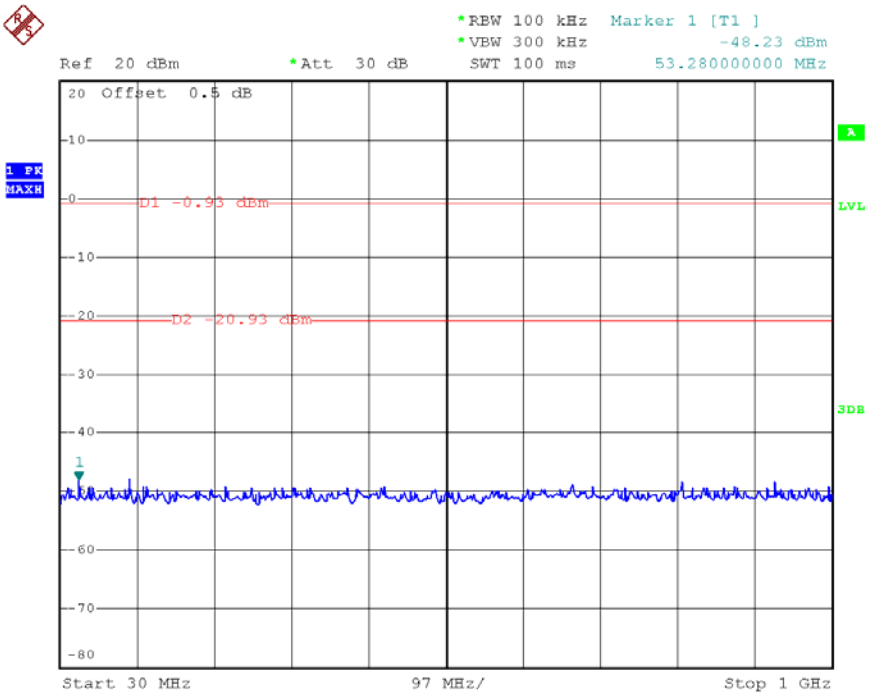
Date: 3.SEP.2013 17:34:44

TX G mode CH11



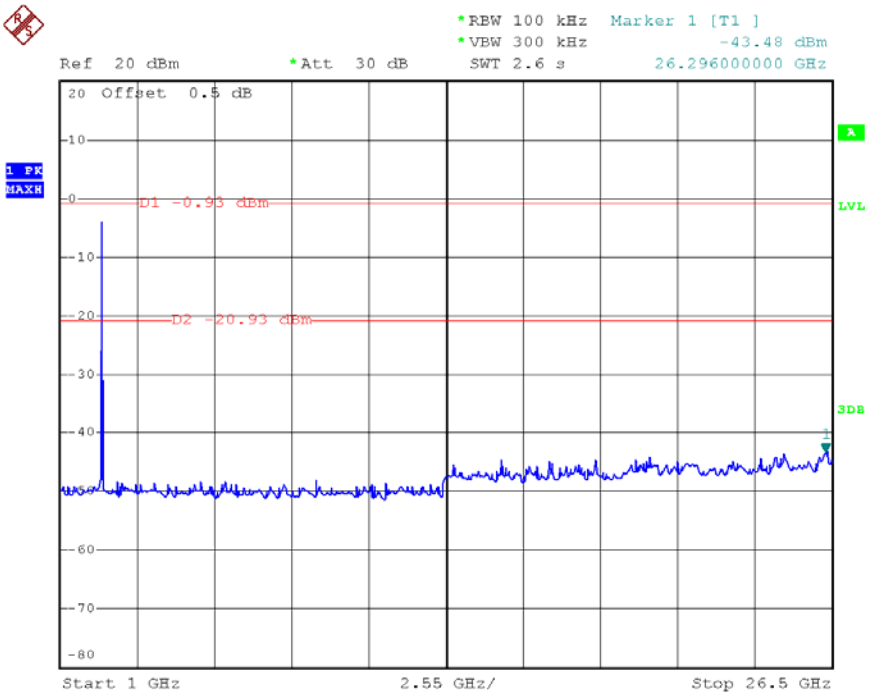
Date: 3.SEP.2013 18:59:51

TX G mode CH01 (30M~1000MHz)



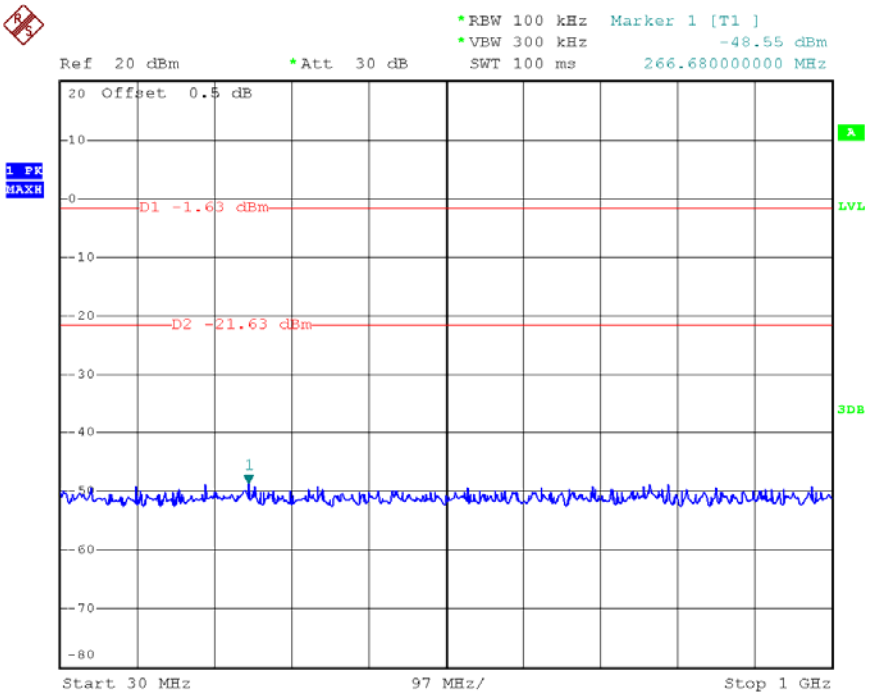
Date: 3.SEP.2013 17:35:25

TX G mode CH01 (1000MHz~10th Harmonic)



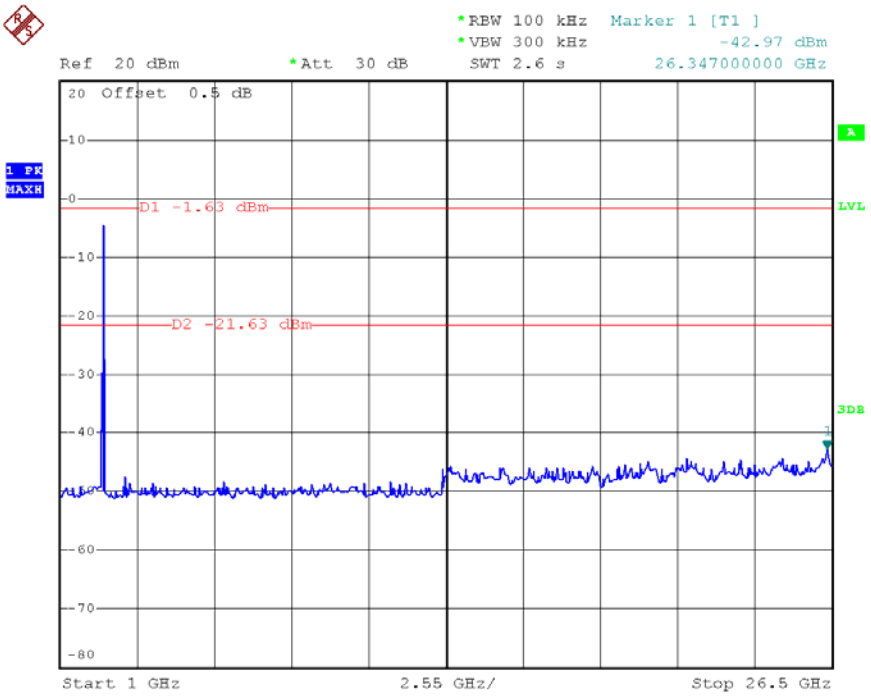
Date: 3.SEP.2013 17:35:47

TX G mode CH06 (30M~1000MHz)



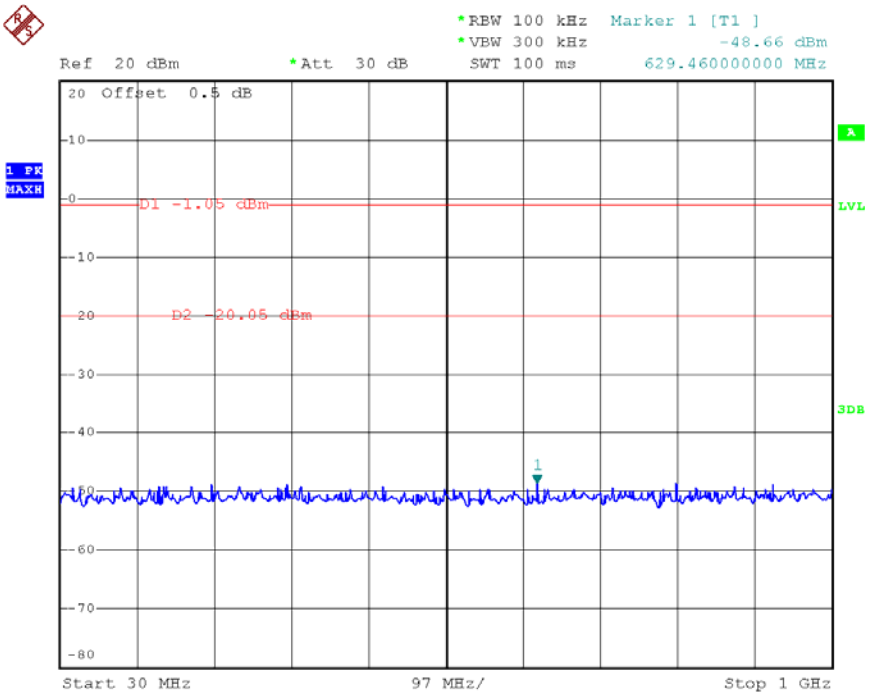
Date: 3.SEP.2013 18:56:11

TX G mode CH06 (1000MHz~10th Harmonic)



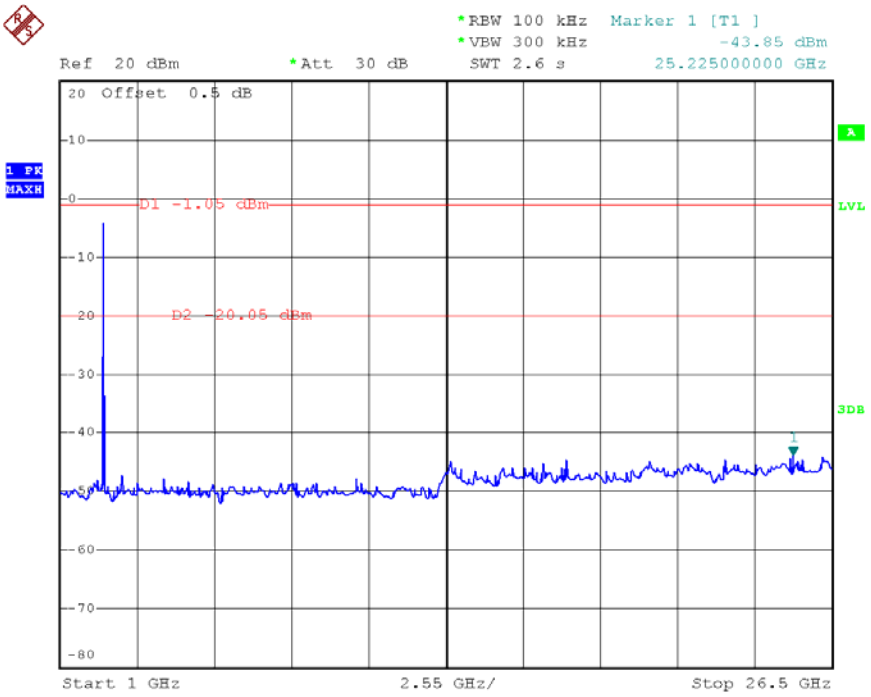
Date: 3.SEP.2013 18:56:28

TX G mode CH11 (30M~1000MHz)



Date: 3.SEP.2013 19:00:09

TX G mode CH11 (1000MHz~10th Harmonic)

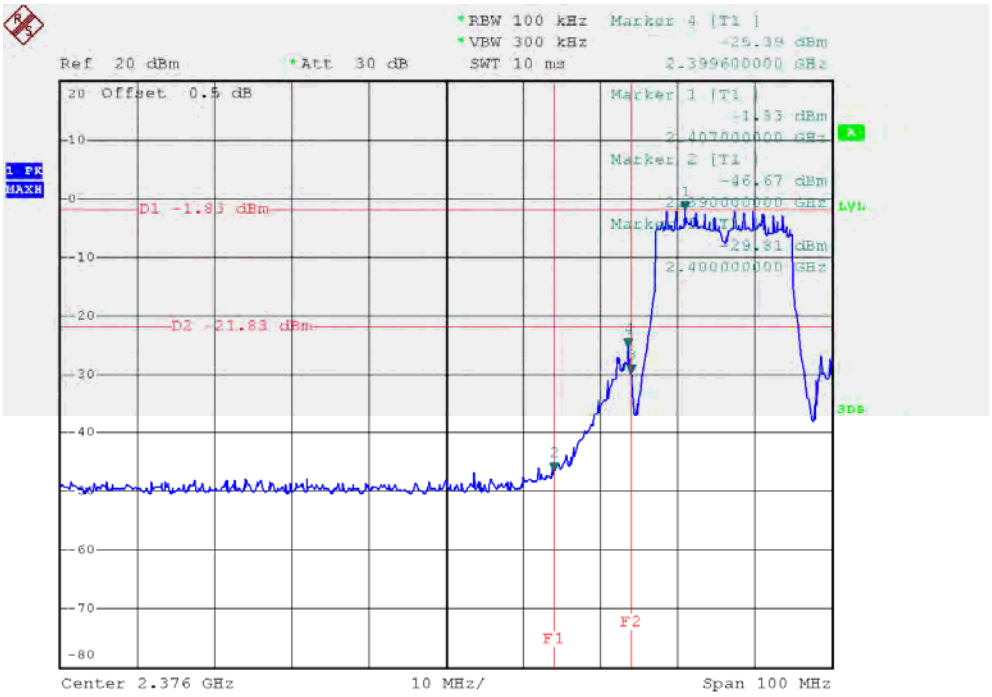


Date: 3.SEP.2013 19:00:23

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE / CH01, CH06 , CH11-ANT 0		

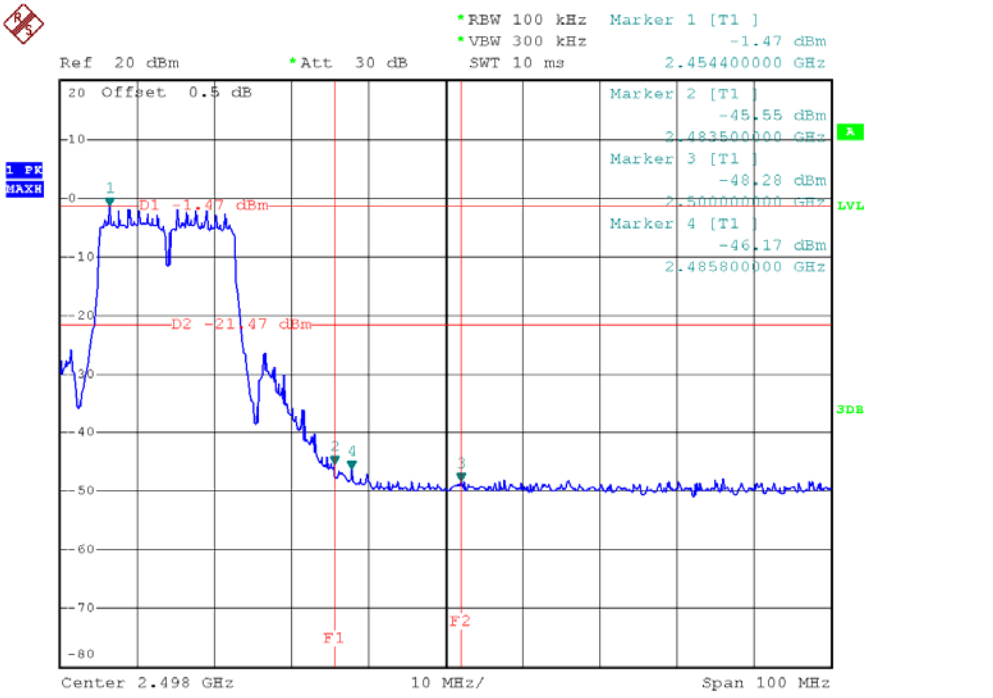
Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2399.60	-25.39	2483.50	-45.55
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX HT20 mode CH01



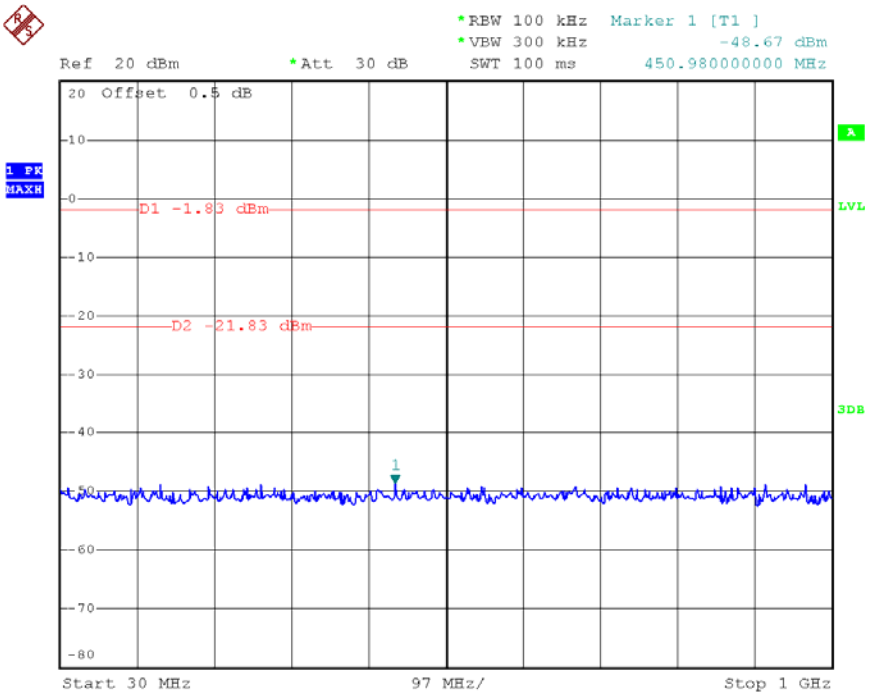
Date: 3.SEP.2013 19:08:38

TX HT20 mode CH11



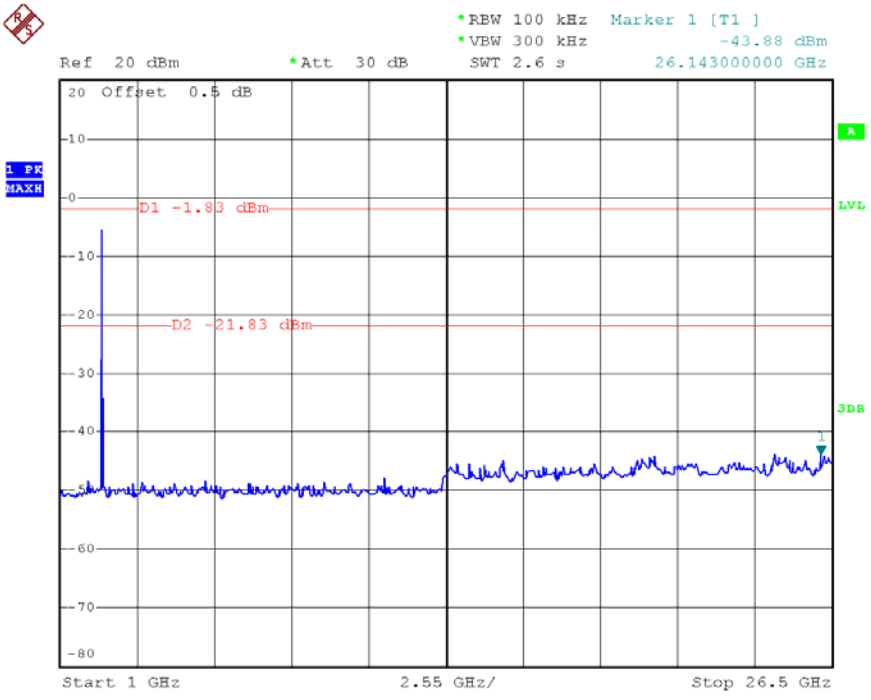
Date: 3.SEP.2013 19:19:06

TX HT20 mode CH01 (30M~1000MHz)



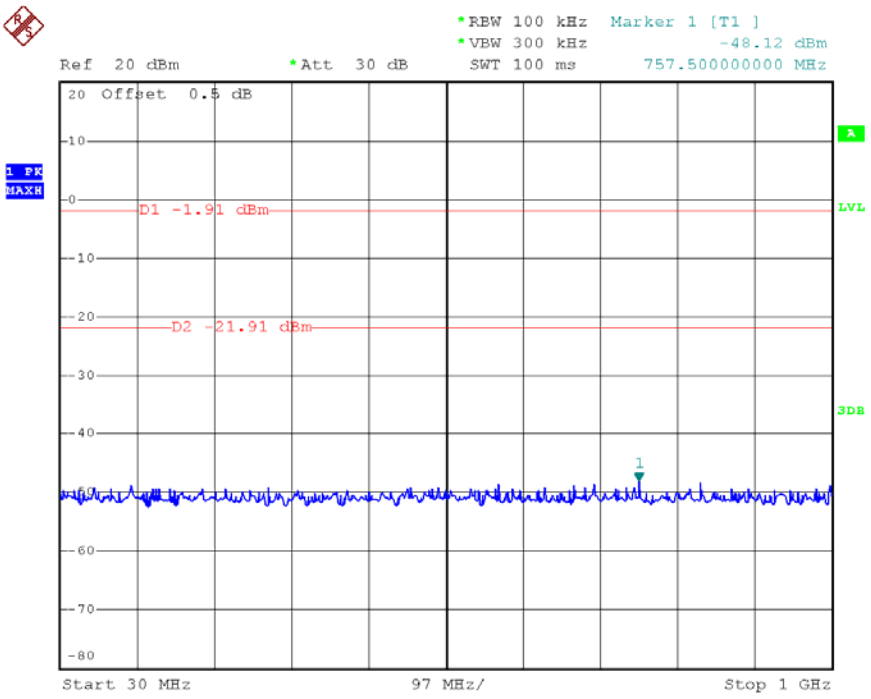
Date: 3.SEP.2013 19:09:12

TX HT20 mode CH01 (1000MHz~10th Harmonic)



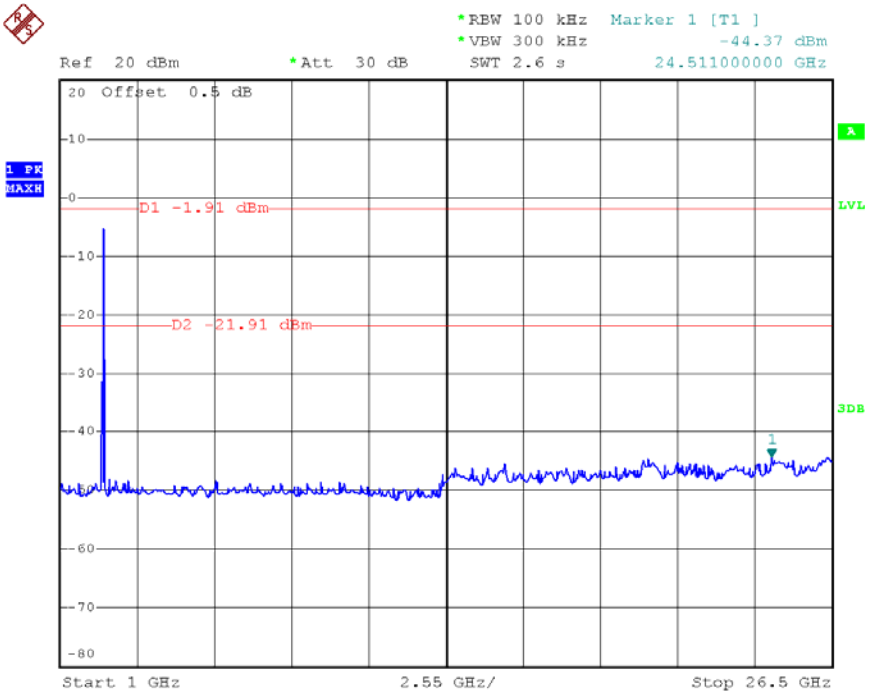
Date: 3.SEP.2013 19:09:27

TX HT20 mode CH06 (30M~1000MHz)



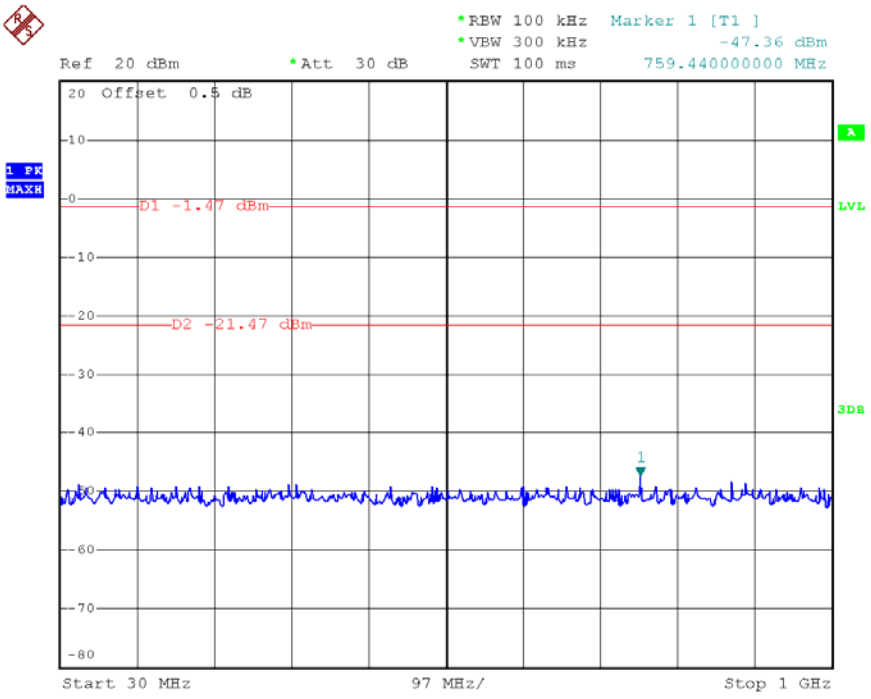
Date: 3.SEP.2013 19:15:21

TX HT20 mode CH06 (1000MHz~10th Harmonic)



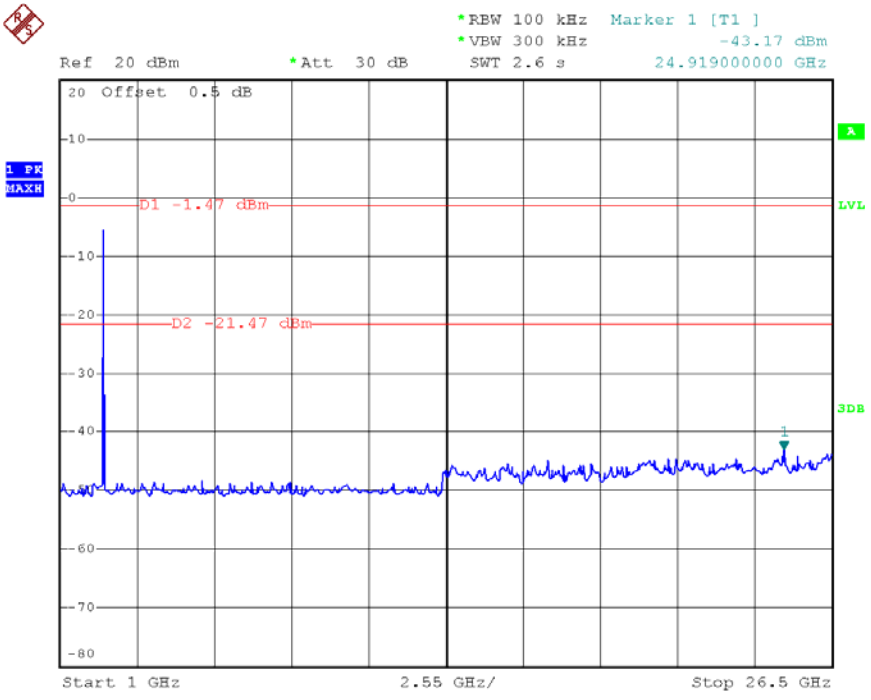
Date: 3.SEP.2013 19:15:34

TX HT20 mode CH11 (30M~1000MHz)



Date: 3.SEP.2013 19:19:24

TX HT20 mode CH11 (1000MHz~10th Harmonic)

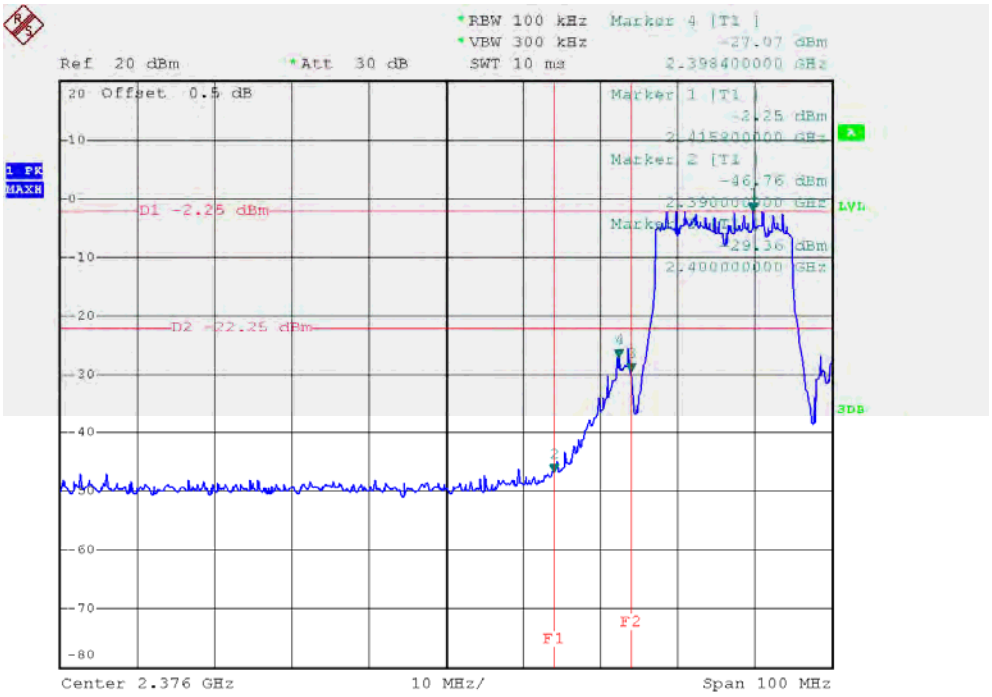


Date: 3.SEP.2013 19:19:44

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE / CH01, CH06 , CH11-ANT 1		

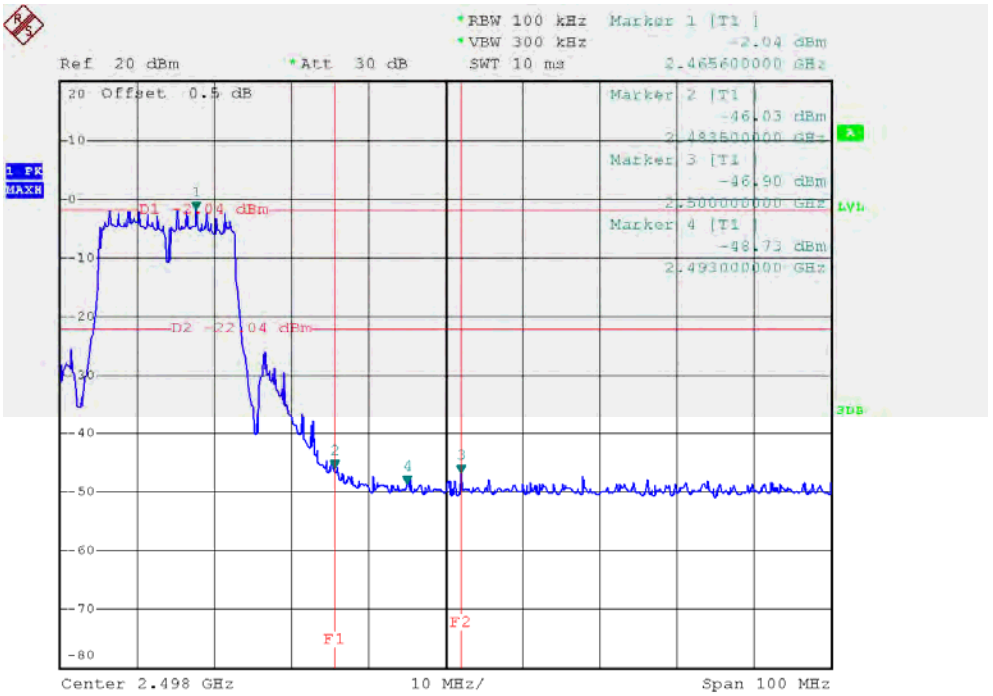
Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2398.40	-27.07	2483.50	-46.03
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX HT20 mode CH01



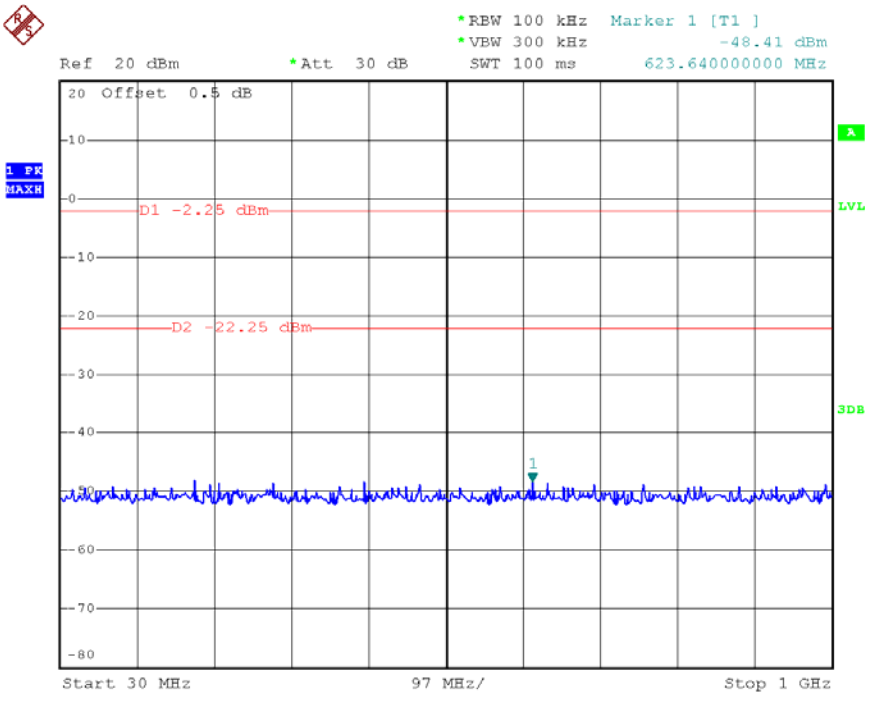
Date: 3.SEP.2013 19:29:34

TX HT20 mode CH11

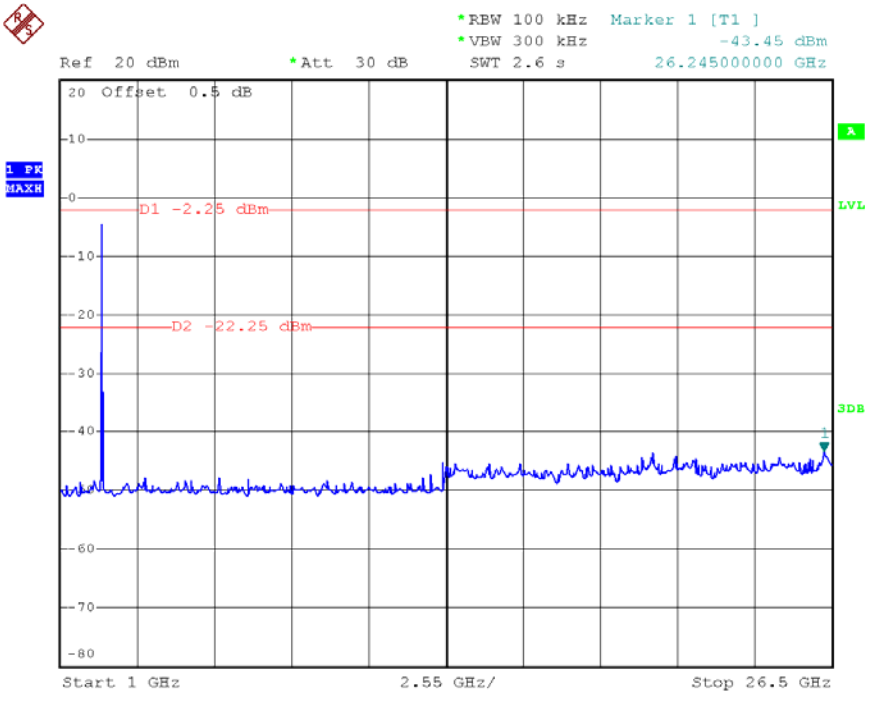


Date: 3.SEP.2013 19:21:36

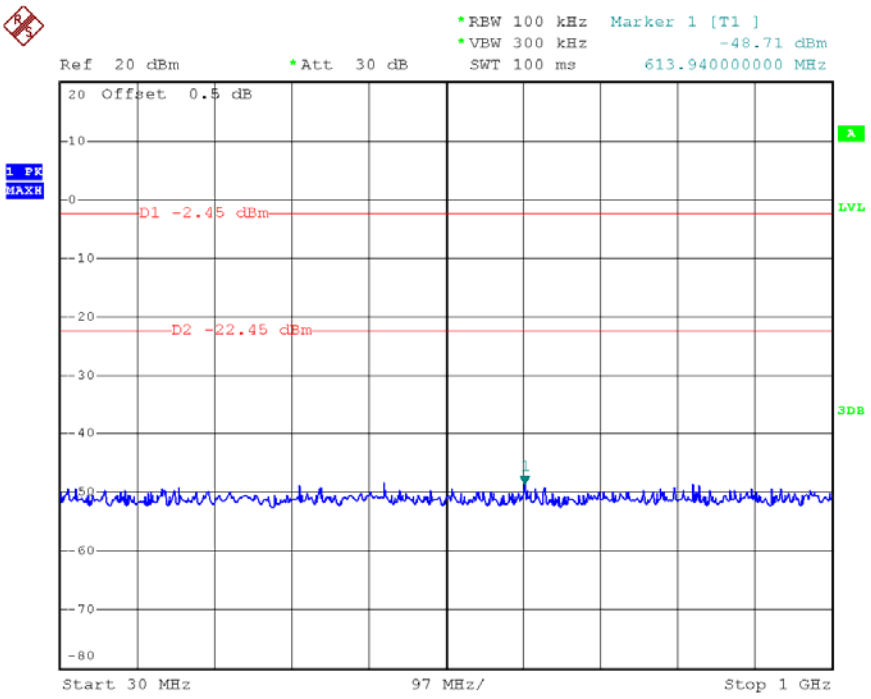
TX HT20 mode CH01 (30M~1000MHz)



TX HT20 mode CH01 (1000MHz~10th Harmonic)

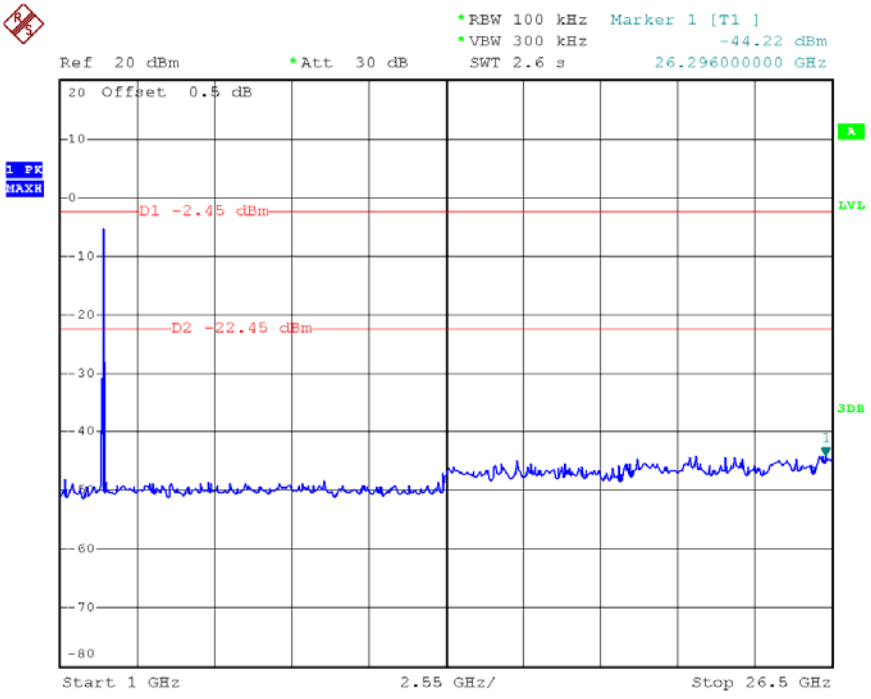


TX HT20 mode CH06 (30M~1000MHz)



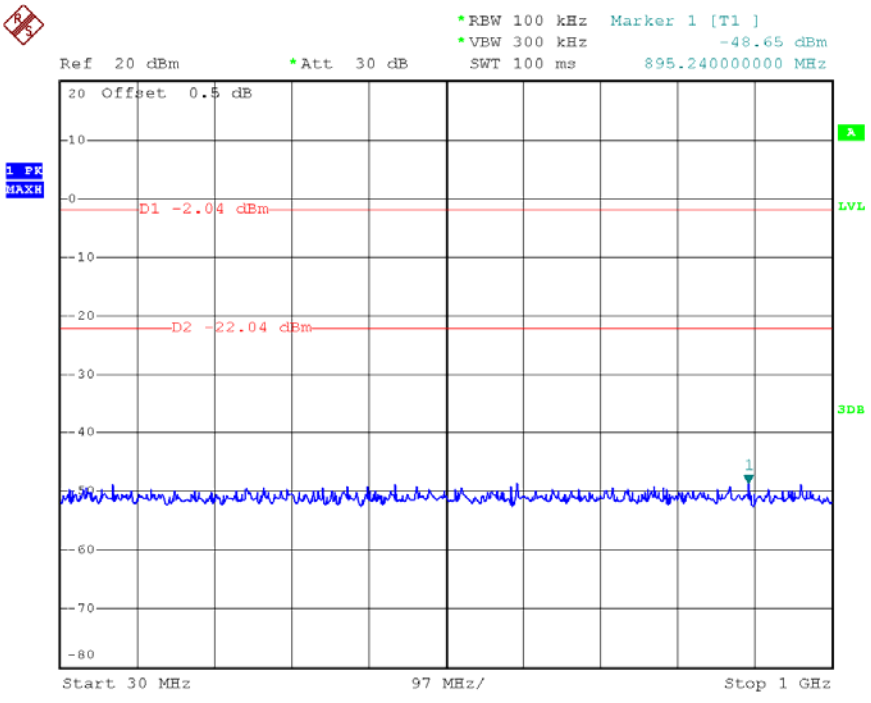
Date: 3.SEP.2013 19:26:15

TX HT20 mode CH06 (1000MHz~10th Harmonic)



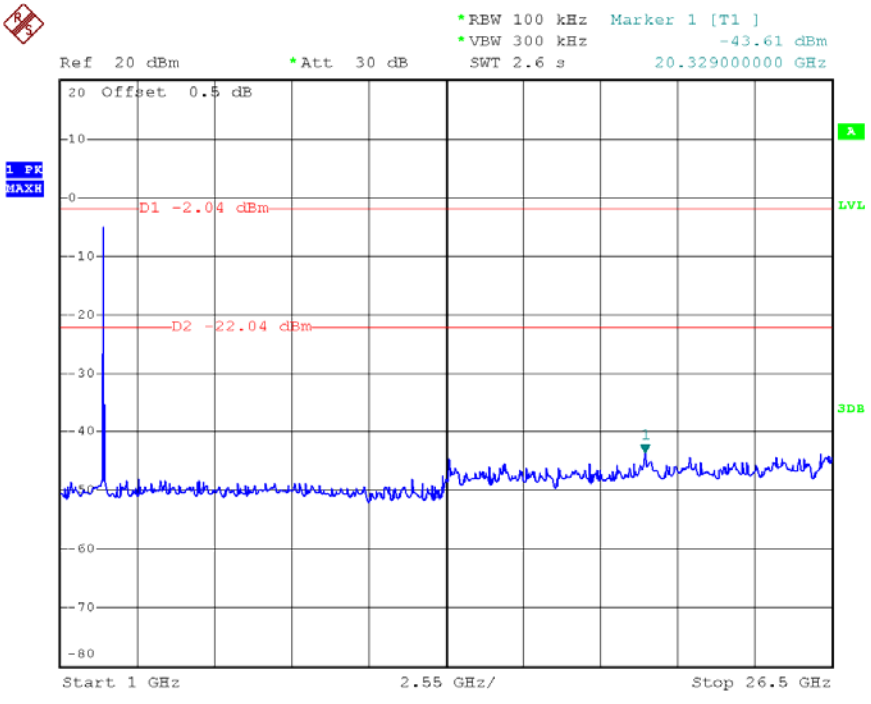
Date: 3.SEP.2013 19:26:33

TX HT20 mode CH11 (30M~1000MHz)



Date: 3.SEP.2013 19:21:54

TX HT20 mode CH11 (1000MHz~10th Harmonic)

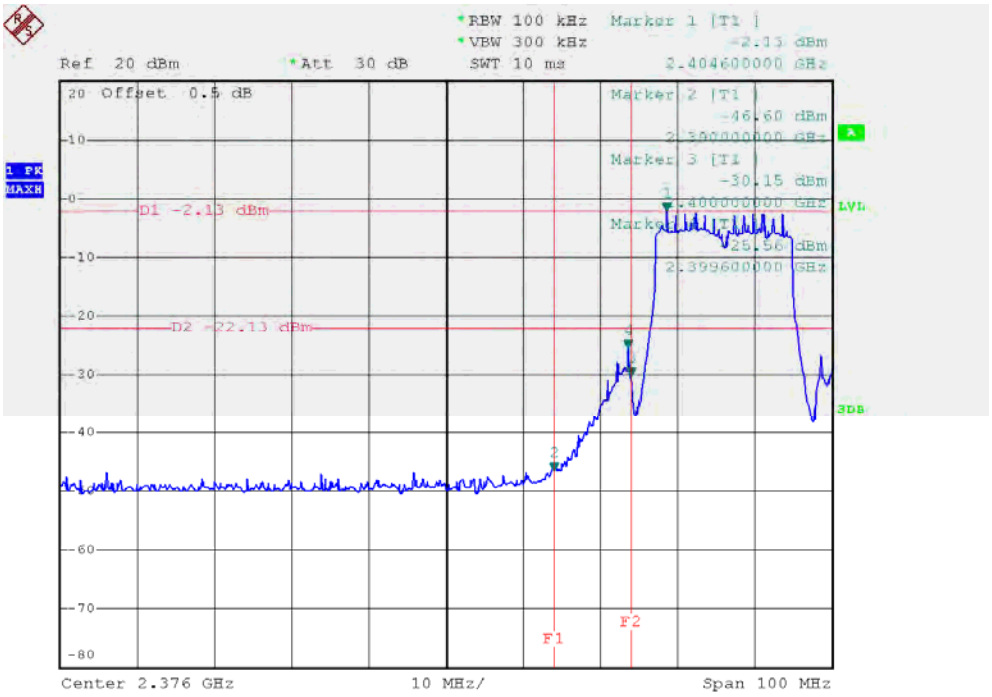


Date: 3.SEP.2013 19:22:07

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-20M MODE / CH01, CH06 , CH11-ANT 2		

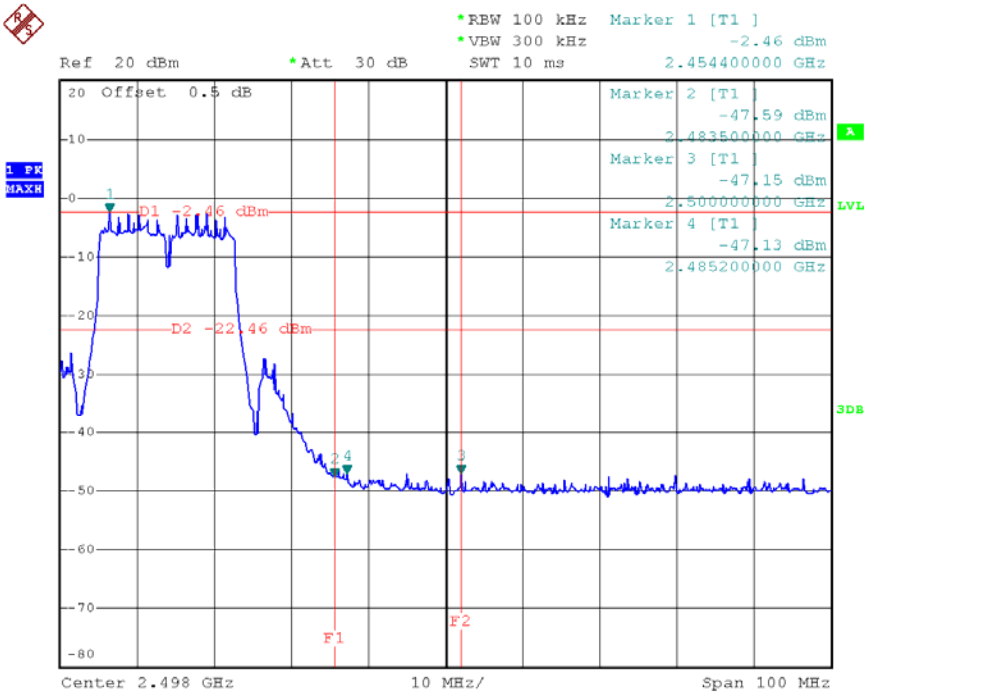
Channel of Worst Data: CH01			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2399.60	-25.56	2500.00	-47.15
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX HT20 mode CH01



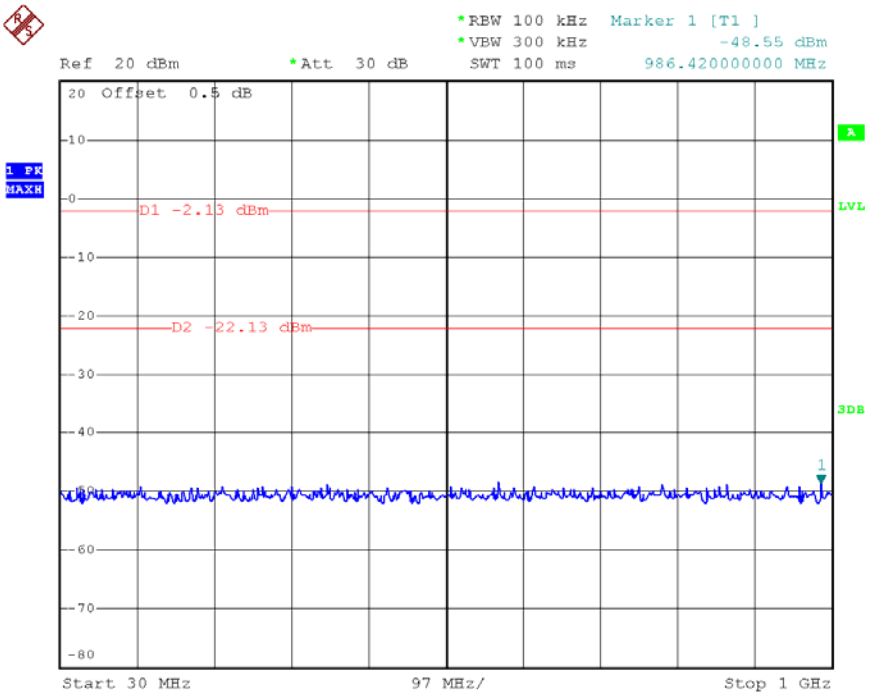
Date: 3.SEP.2013 19:34:51

TX HT20 mode CH11



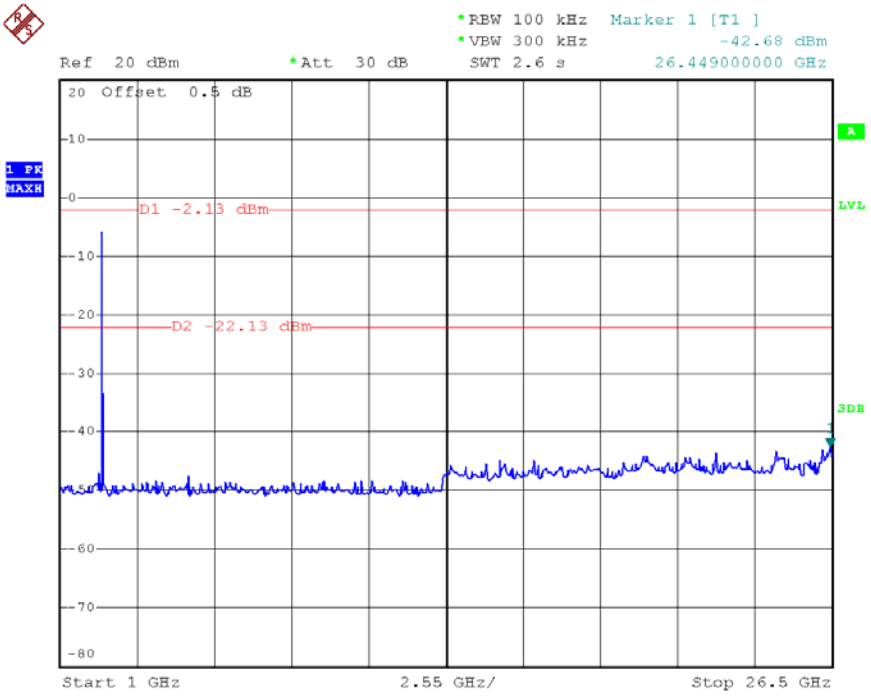
Date: 3.SEP.2013 19:46:23

TX HT20 mode CH01 (30M~1000MHz)



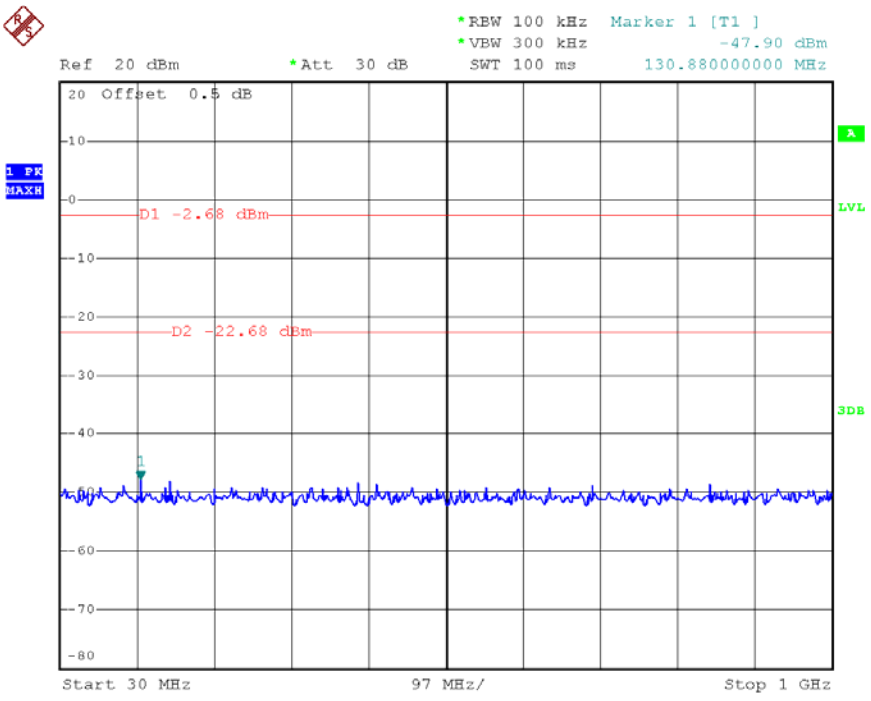
Date: 3.SEP.2013 19:35:11

TX HT20 mode CH01 (1000MHz~10th Harmonic)



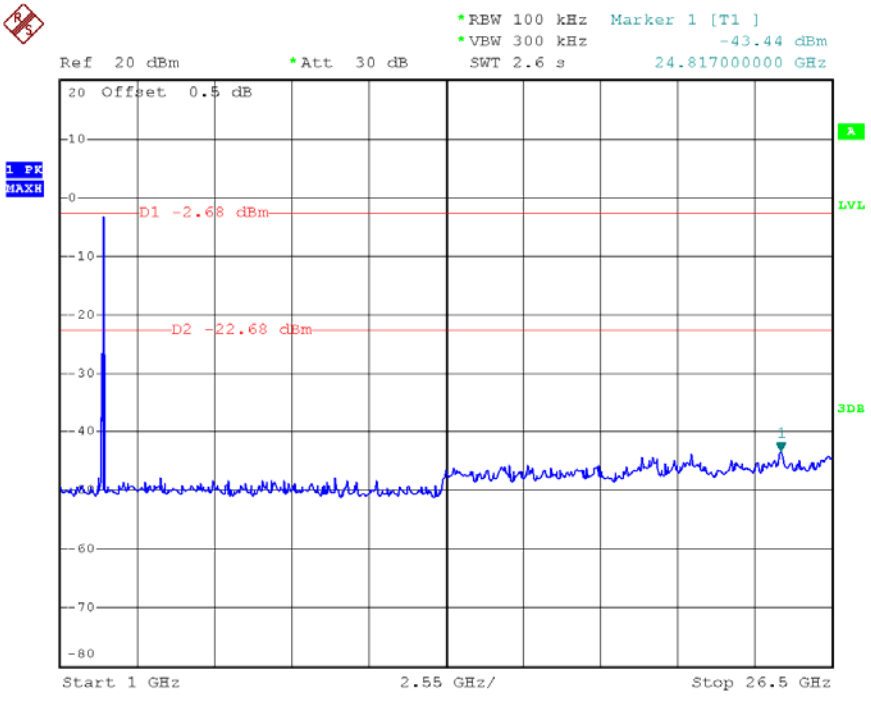
Date: 3.SEP.2013 19:35:29

TX HT20 mode CH06 (30M~1000MHz)



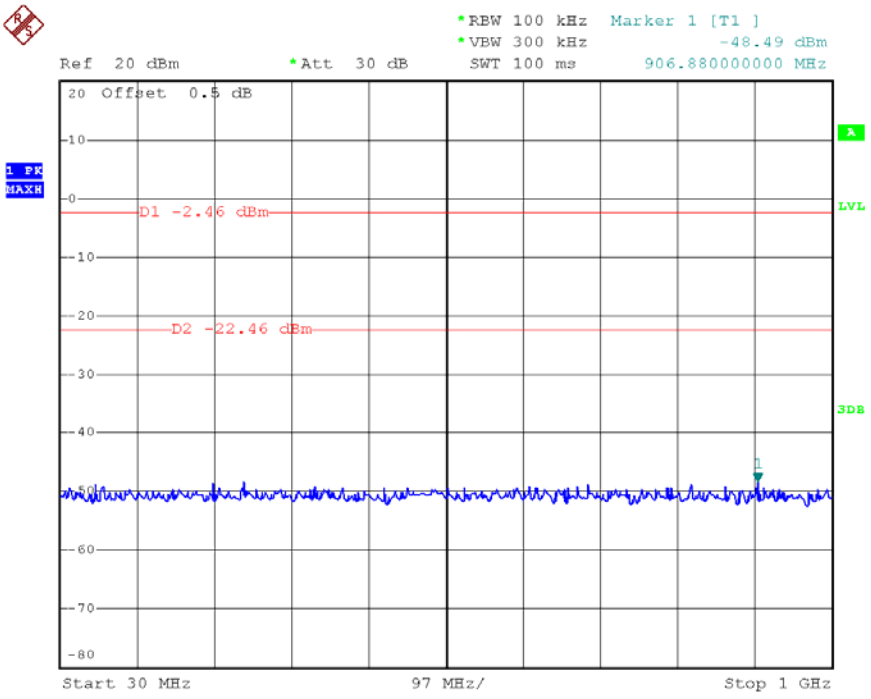
Date: 3.SEP.2013 19:42:38

TX HT20 mode CH06 (1000MHz~10th Harmonic)

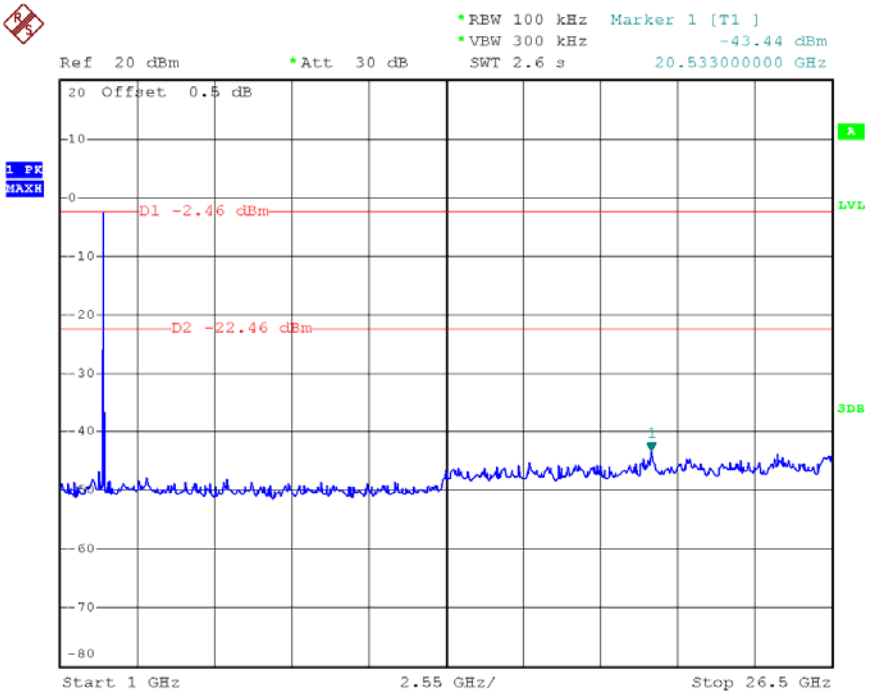


Date: 3.SEP.2013 19:42:58

TX HT20 mode CH11 (30M~1000MHz)



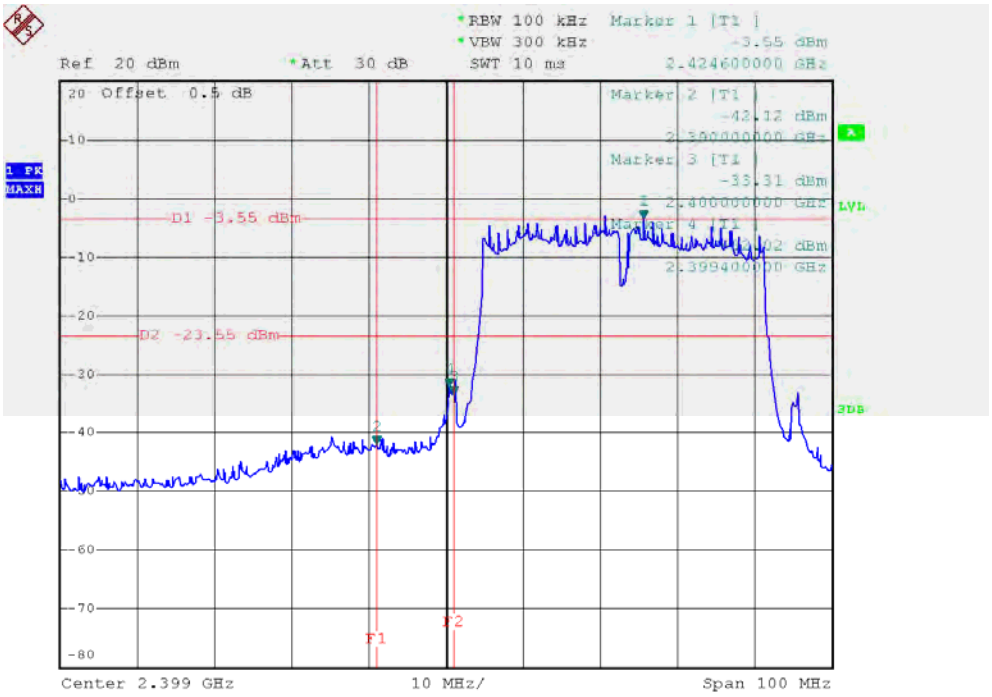
TX HT20 mode CH11 (1000MHz~10th Harmonic)



EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-40M MODE / CH03, CH06 , CH09-ANT 0		

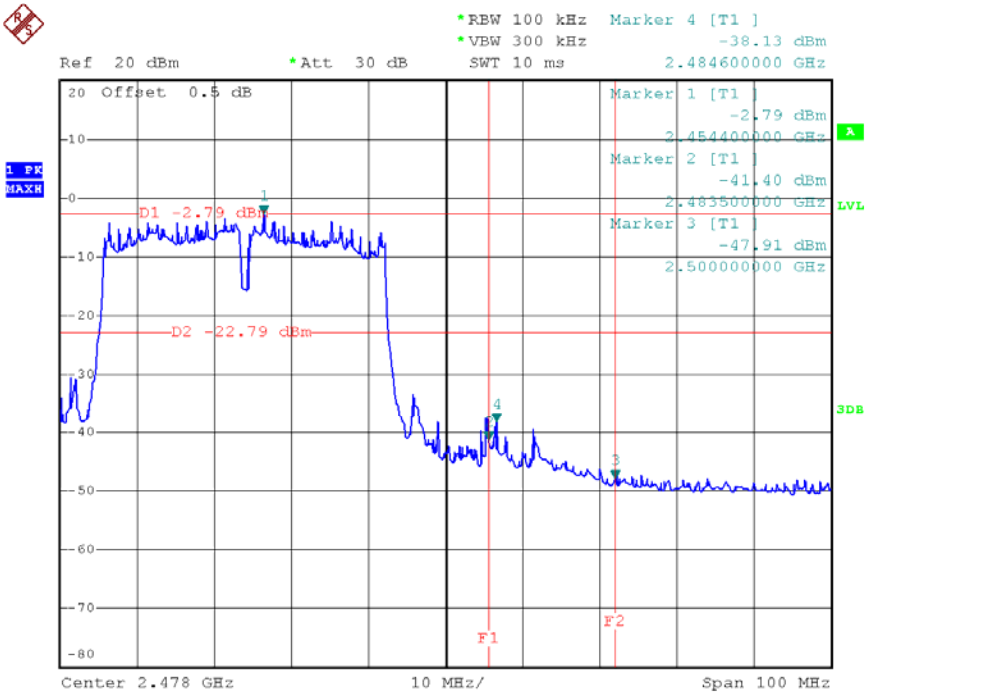
Channel of Worst Data: CH09			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2399.40	-32.02	2484.60	-38.13
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX HT40 mode CH03



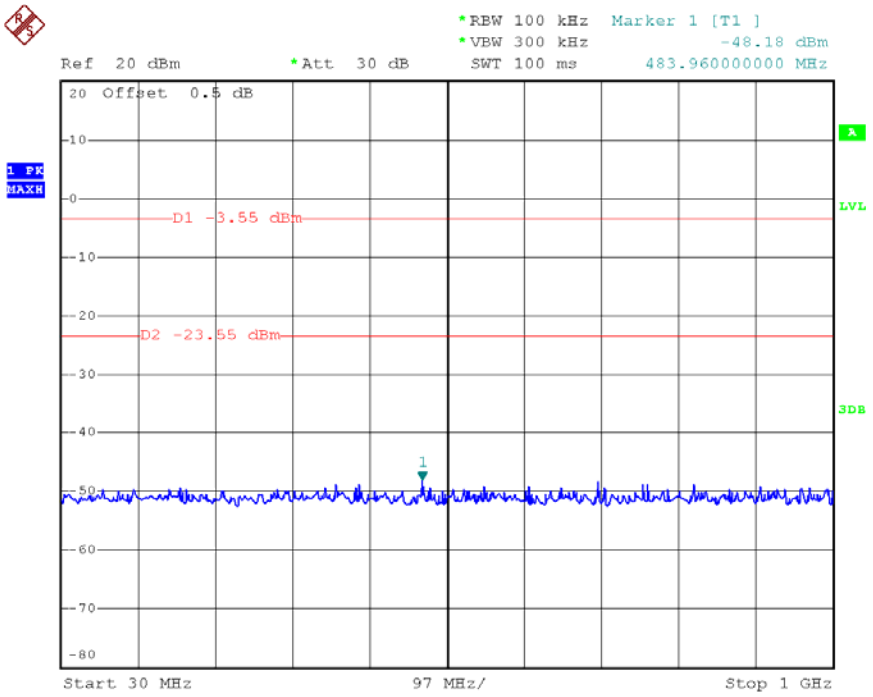
Date: 3.SEP.2013 20:27:43

TX HT40 mode CH09



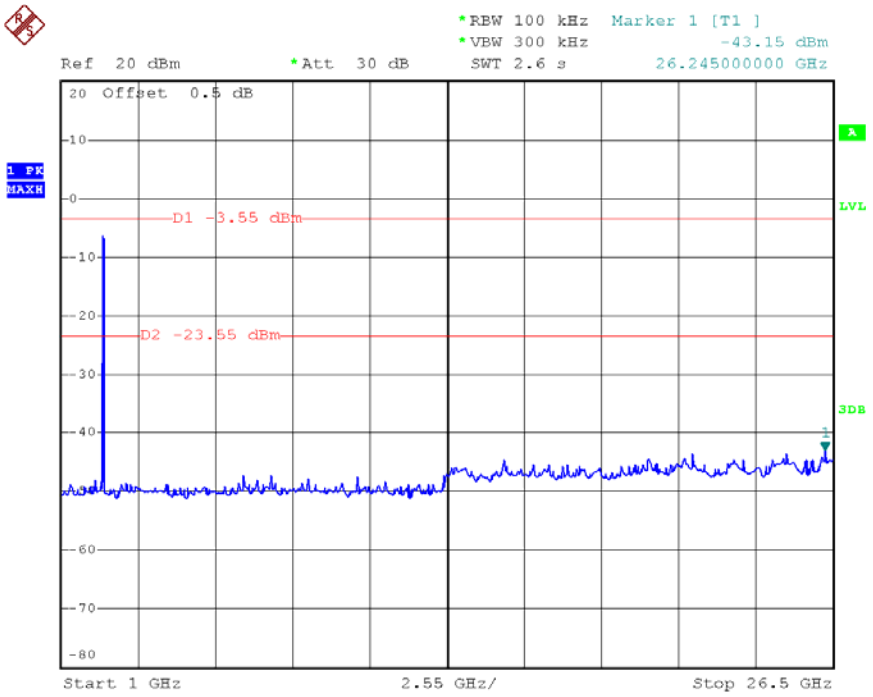
Date: 3.SEP.2013 20:33:32

TX HT40 mode CH03 (30M~1000MHz)



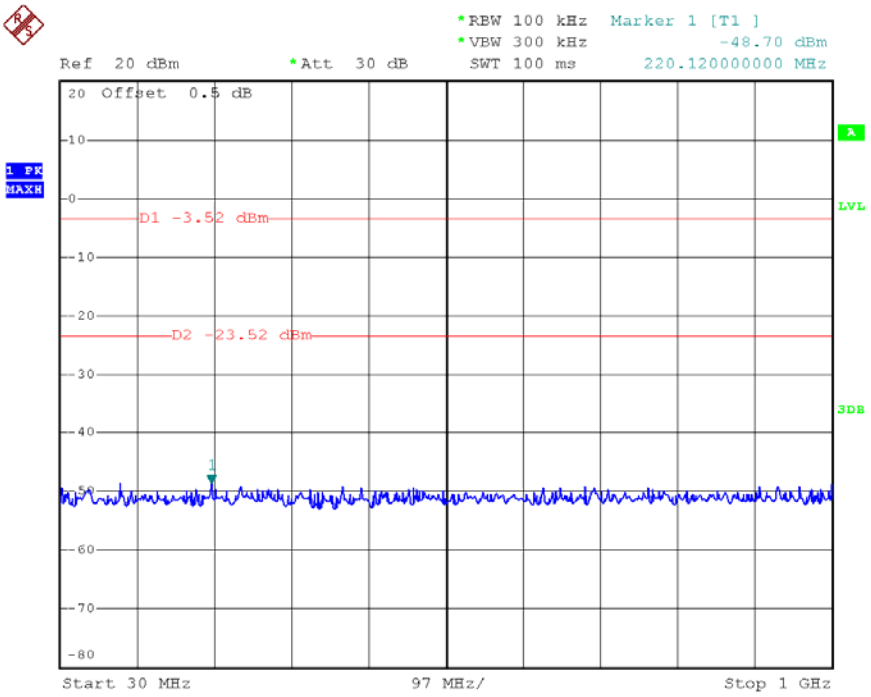
Date: 3.SEP.2013 20:28:02

TX HT40 mode CH03 (1000MHz~10th Harmonic)



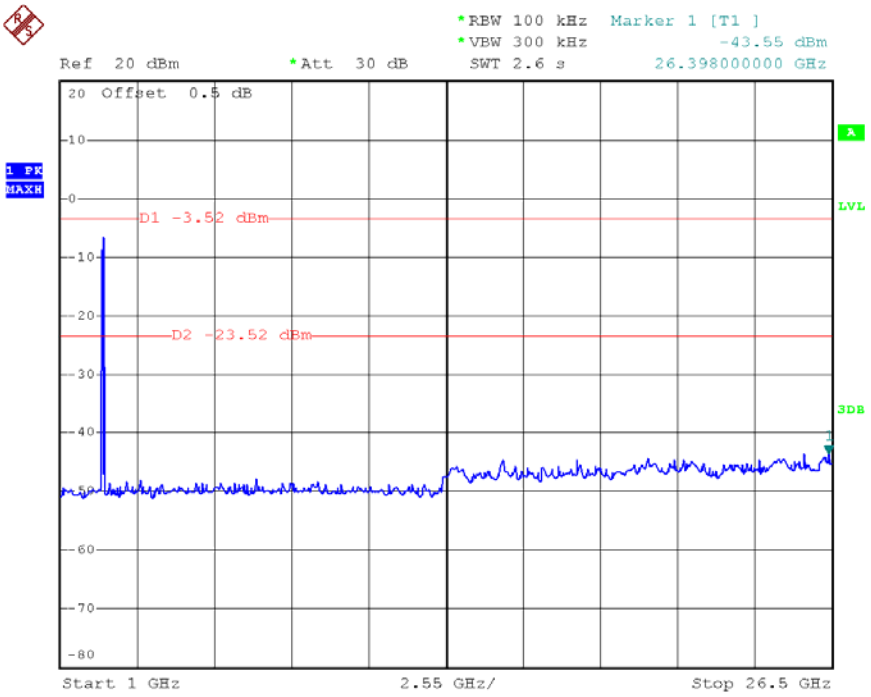
Date: 3.SEP.2013 20:28:22

TX HT40 mode CH06 (30M~1000MHz)



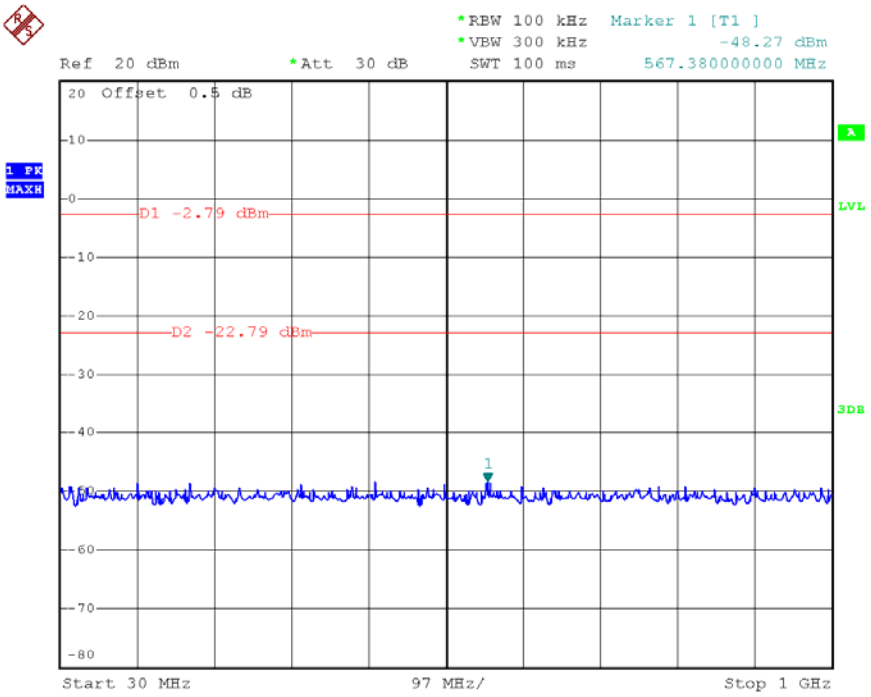
Date: 3.SEP.2013 20:30:24

TX HT40 mode CH06 (1000MHz~10th Harmonic)



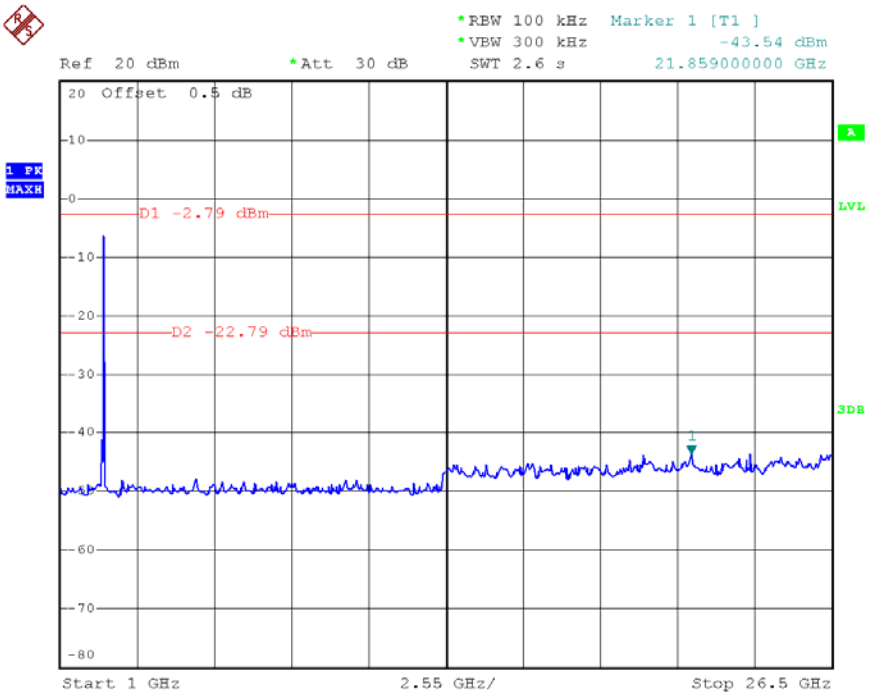
Date: 3.SEP.2013 20:30:45

TX HT40 mode CH09 (30M~1000MHz)



Date: 3.SEP.2013 20:33:52

TX HT40 mode CH09 (1000MHz~10th Harmonic)

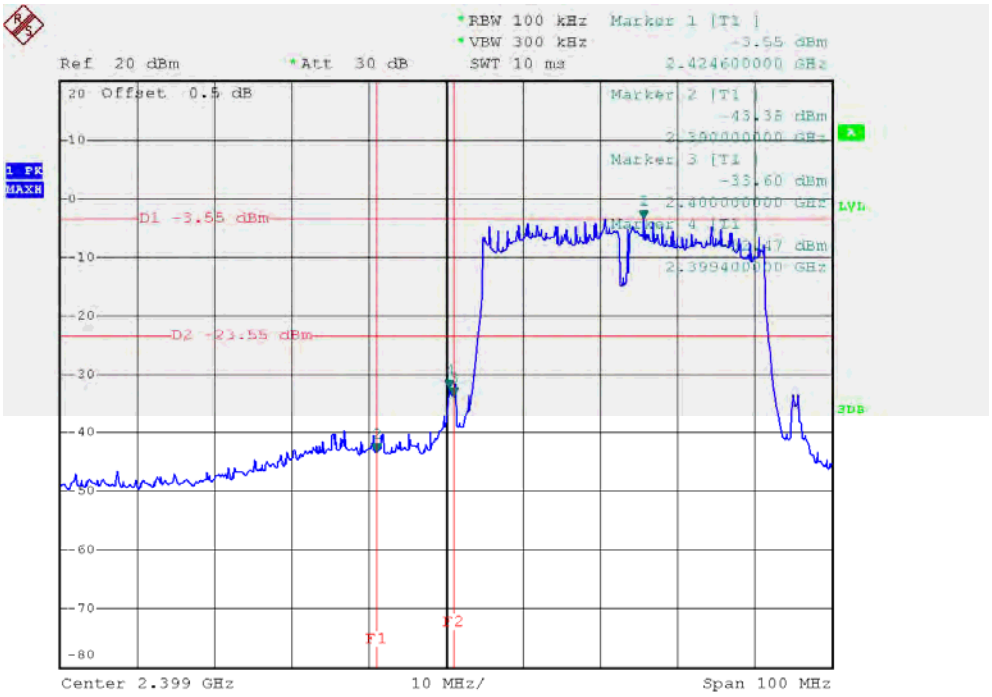


Date: 3.SEP.2013 20:34:18

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-40M MODE / CH03, CH06 , CH09-ANT 1		

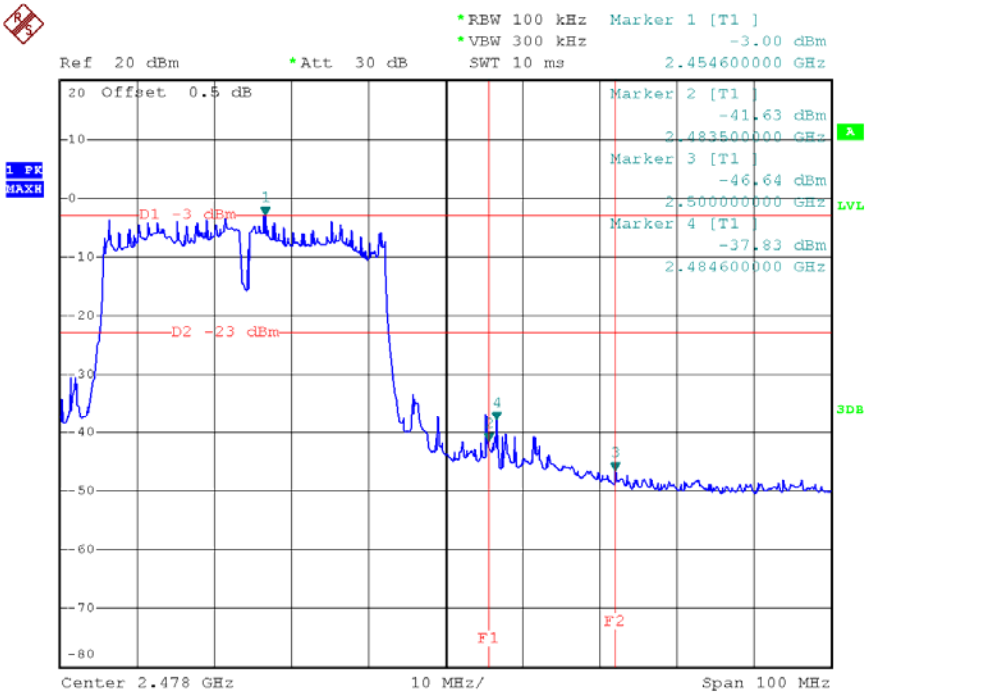
Channel of Worst Data: CH09			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2399.40	-32.47	2484.60	-37.83
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX HT40 mode CH03



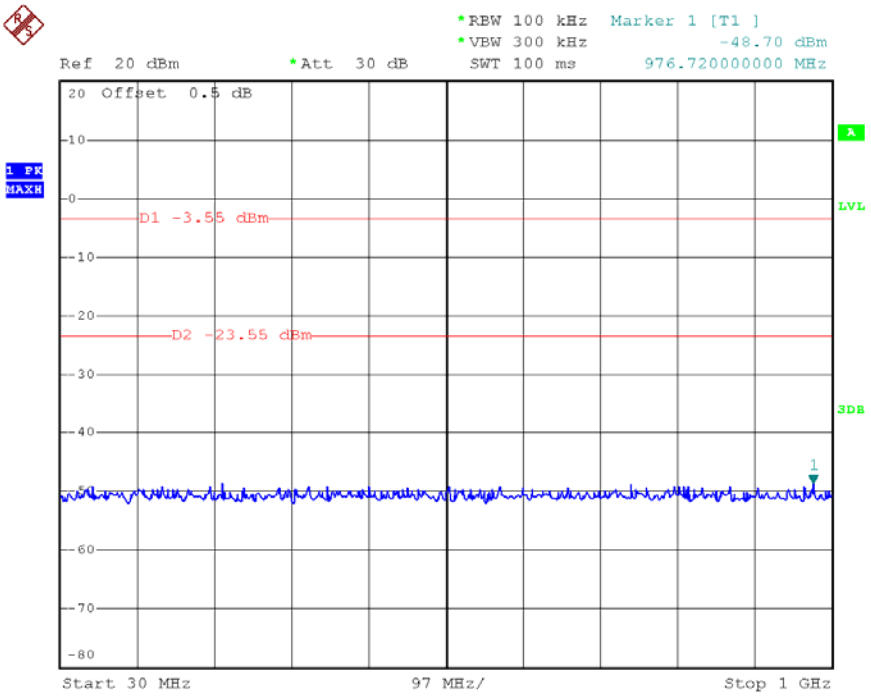
Date: 3.SEP.2013 20:23:32

TX HT40 mode CH09



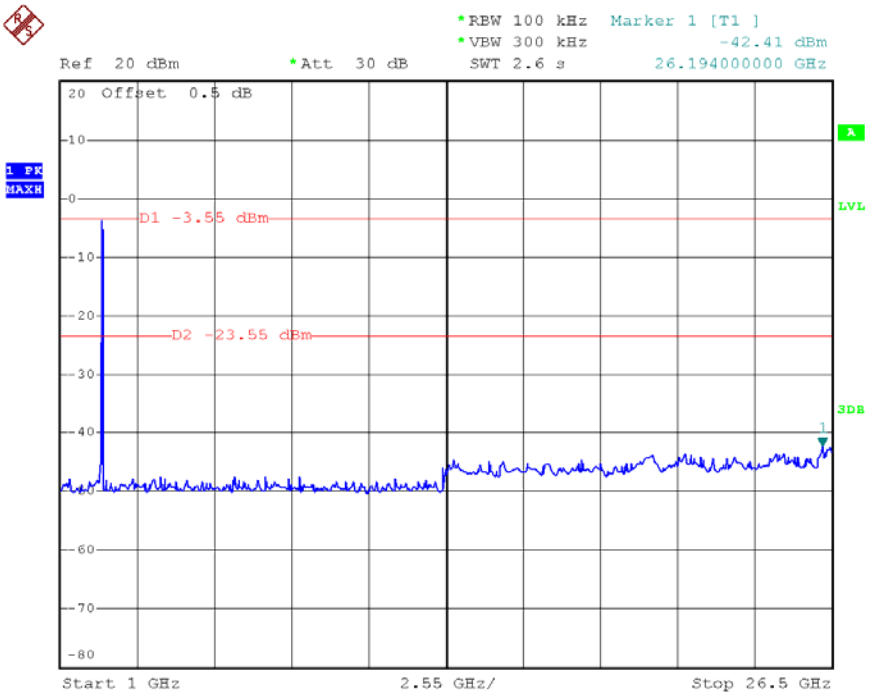
Date: 3.SEP.2013 20:12:53

TX HT40 mode CH03 (30M~1000MHz)



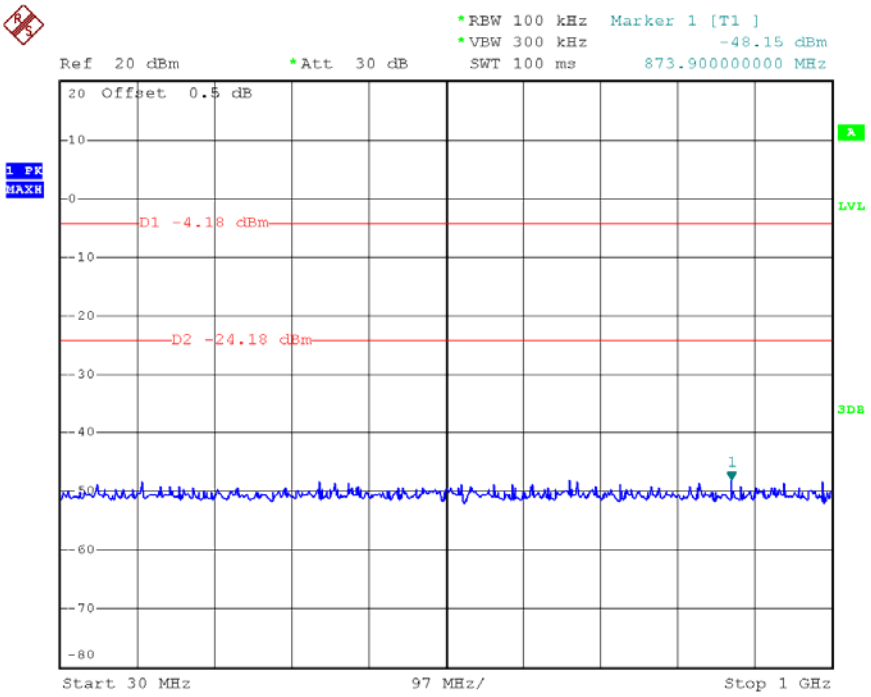
Date: 3.SEP.2013 20:23:51

TX HT40 mode CH03 (1000MHz~10th Harmonic)



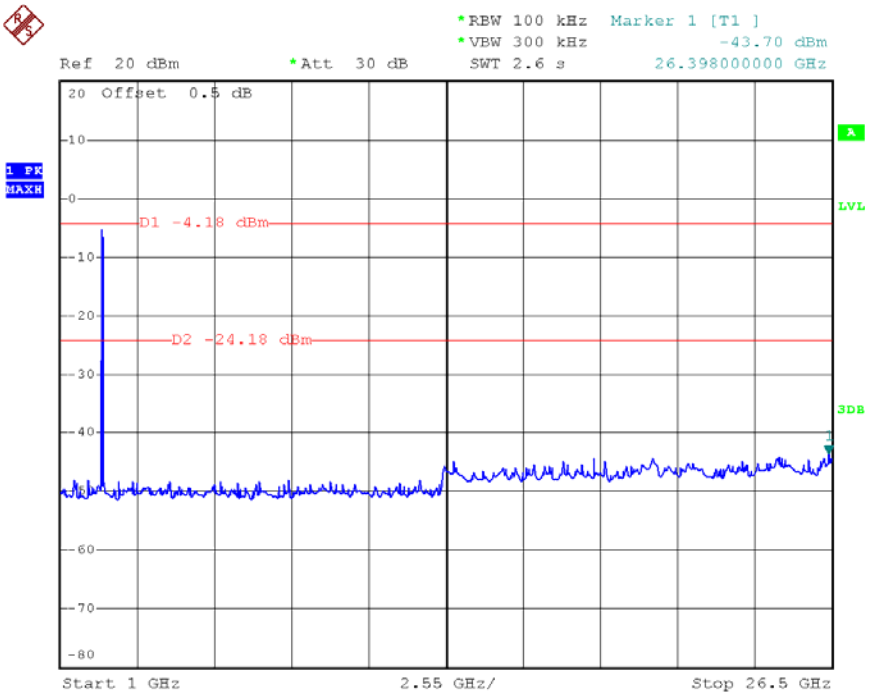
Date: 3.SEP.2013 20:24:45

TX HT40 mode CH06 (30M~1000MHz)



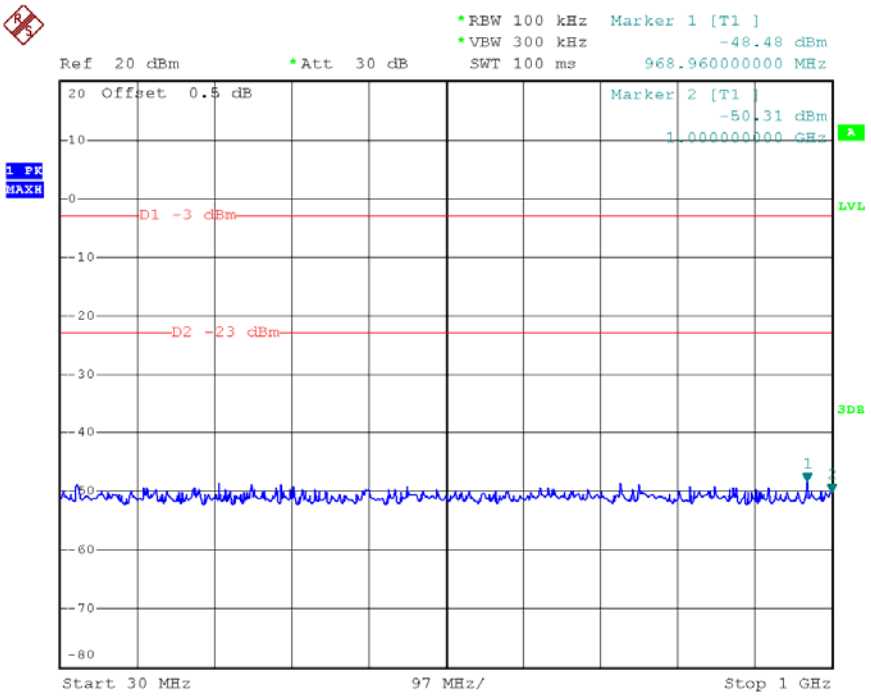
Date: 3.SEP.2013 20:19:06

TX HT40 mode CH06 (1000MHz~10th Harmonic)



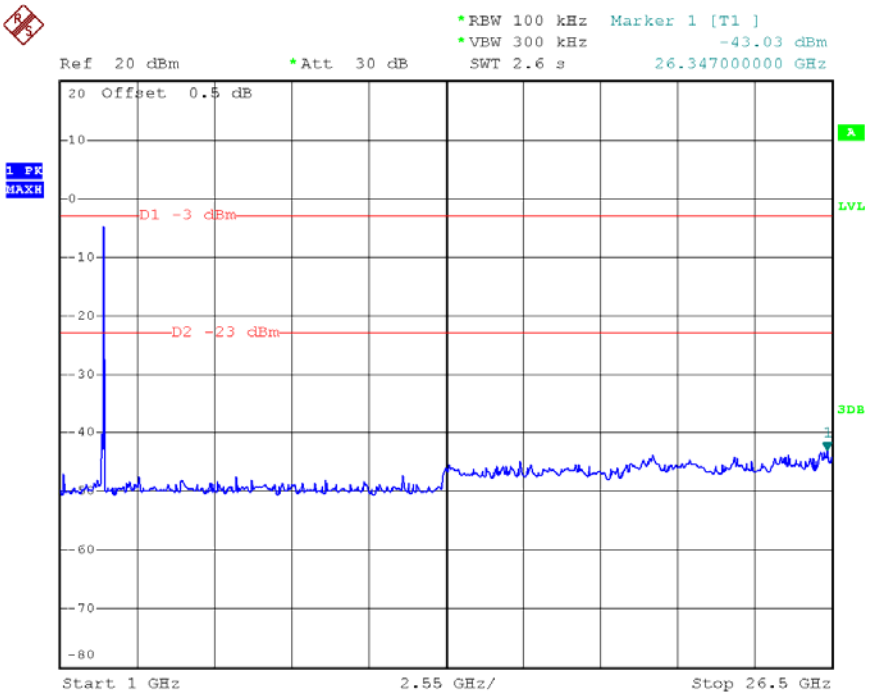
Date: 3.SEP.2013 20:19:23

TX HT40 mode CH09 (30M~1000MHz)



Date: 3.SEP.2013 20:13:17

TX HT40 mode CH09 (1000MHz~10th Harmonic)

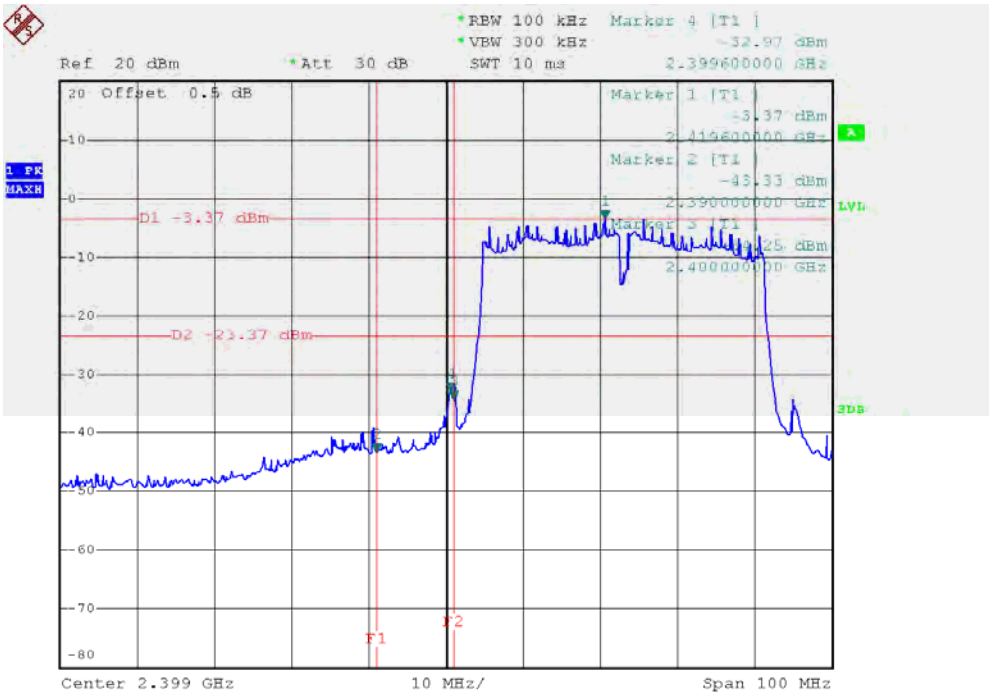


Date: 3.SEP.2013 20:13:50

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N-40M MODE / CH03, CH06 , CH09-ANT 2		

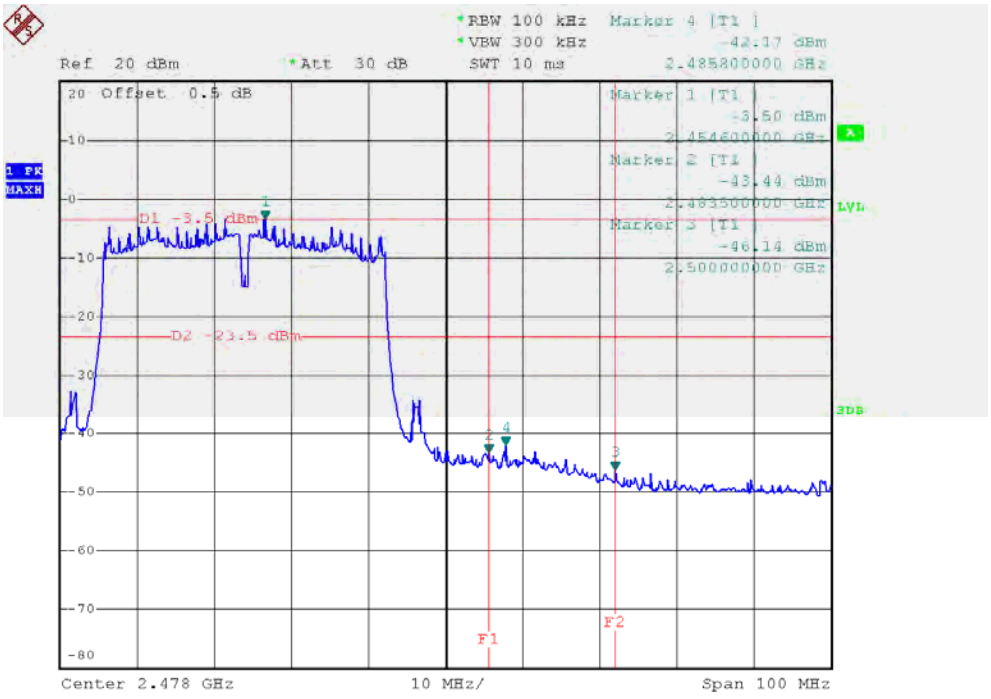
Channel of Worst Data: CH09			
The max. radio frequency power in any 100kHz bandwidth outside the frequency band		The max. radio frequency power in any 100 kHz bandwidth within the frequency band.	
FREQUENCY(MHz)	POWER(dBm)	FREQUENCY(MHz)	POWER(dBm)
2400.00	-32.25	2485.80	-42.17
Result			
In any 100kHz bandwidth outside the frequency band, the radio frequency power is at least 20dB below that in the 100kHz bandwidth within the band that contains the highest lever of the desired power.			

TX HT40 mode CH03



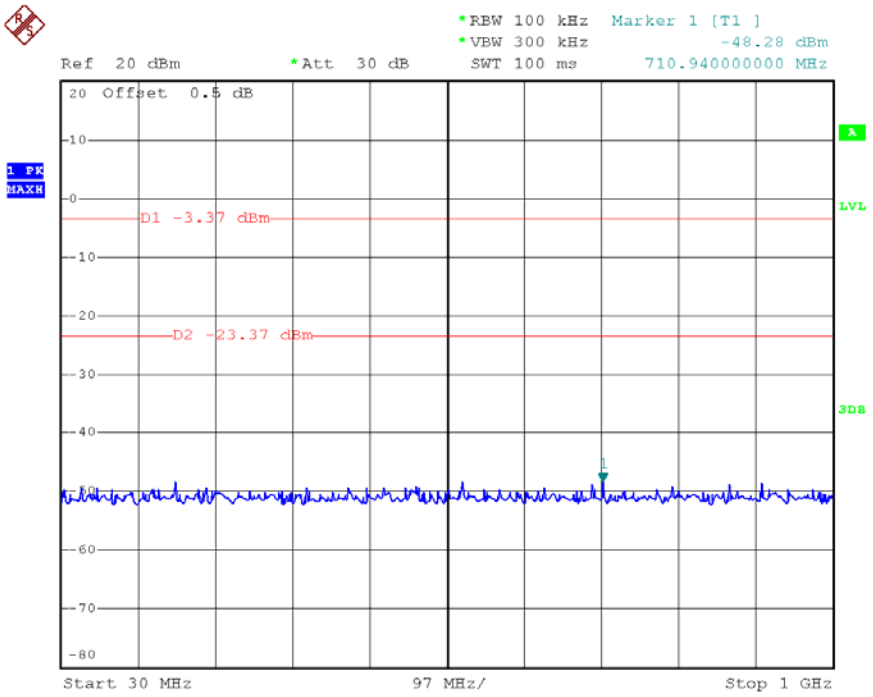
Date: 3.SEP.2013 19:55:34

TX HT40 mode CH09



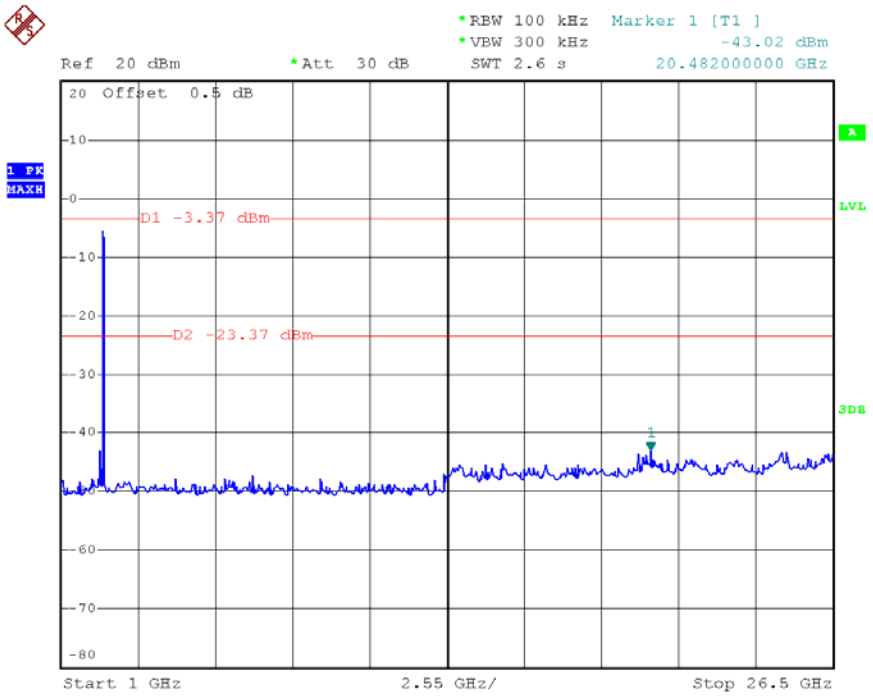
Date: 3.SEP.2013 20:06:04

TX HT40 mode CH03 (30M~1000MHz)



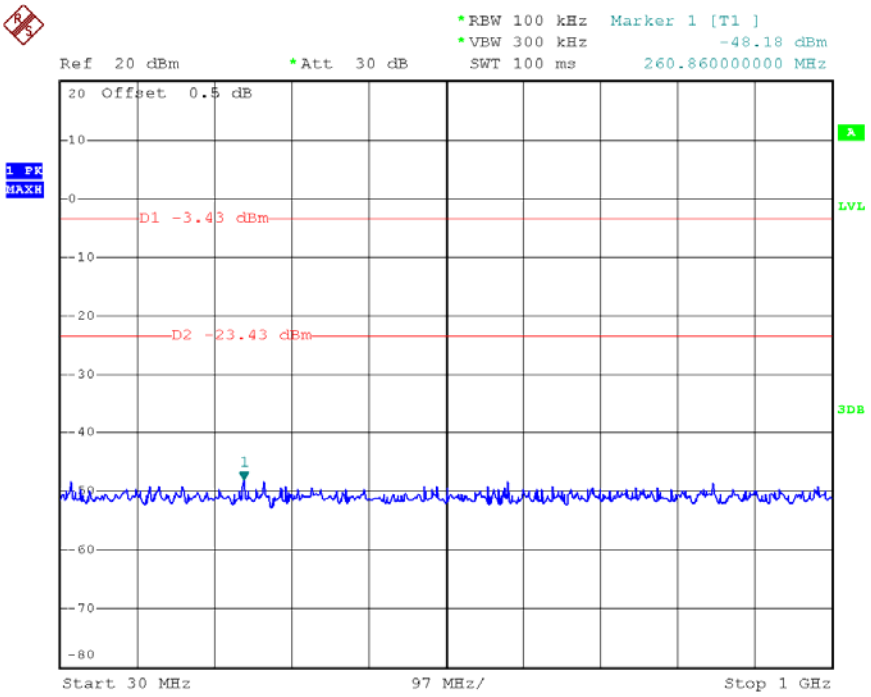
Date: 3.SEP.2013 19:56:04

TX HT40 mode CH03 (1000MHz~10th Harmonic)



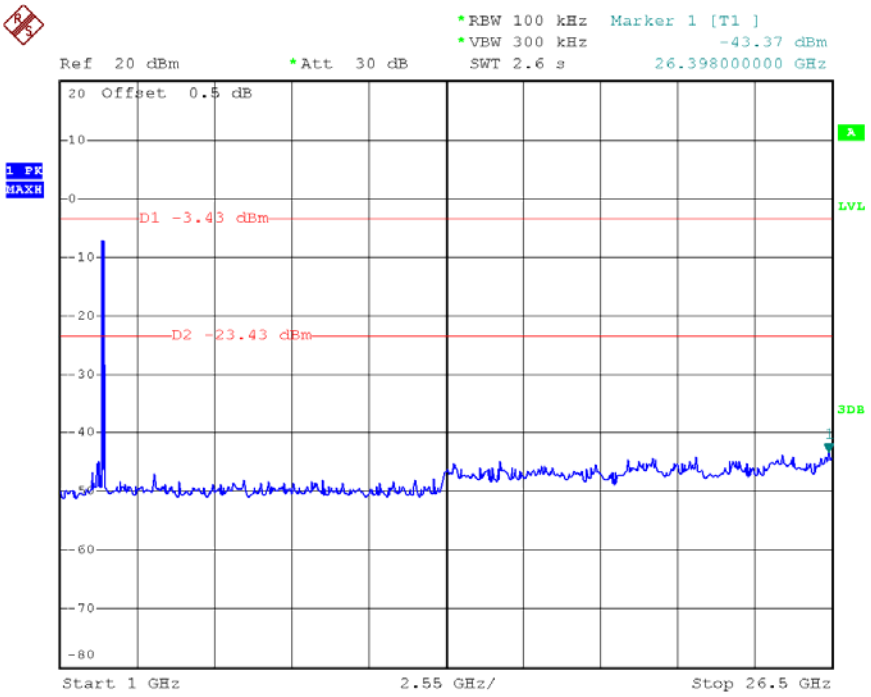
Date: 3.SEP.2013 19:56:41

TX HT40 mode CH06 (30M~1000MHz)



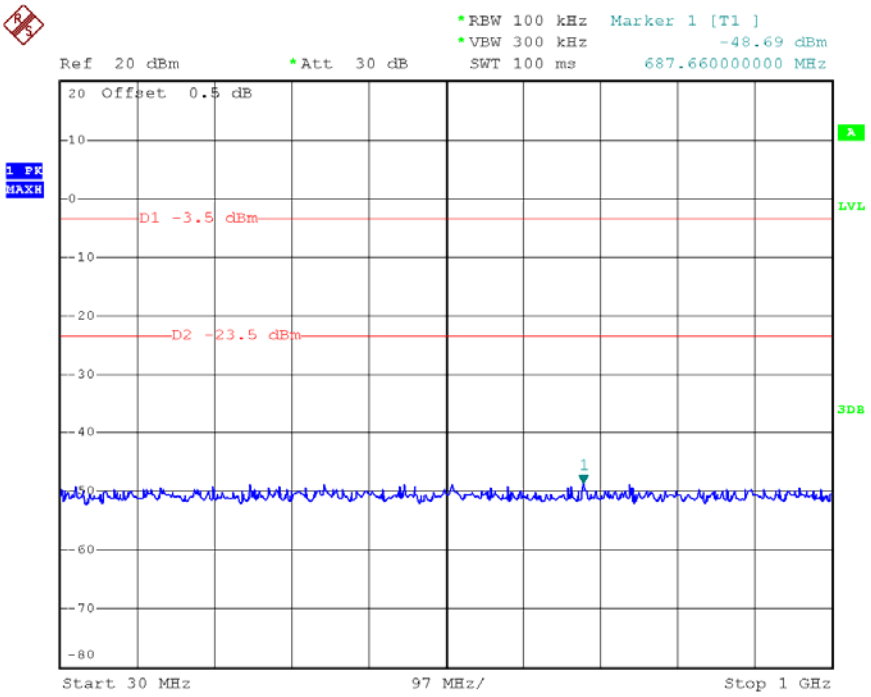
Date: 3.SEP.2013 20:01:12

TX HT40 mode CH06 (1000MHz~10th Harmonic)



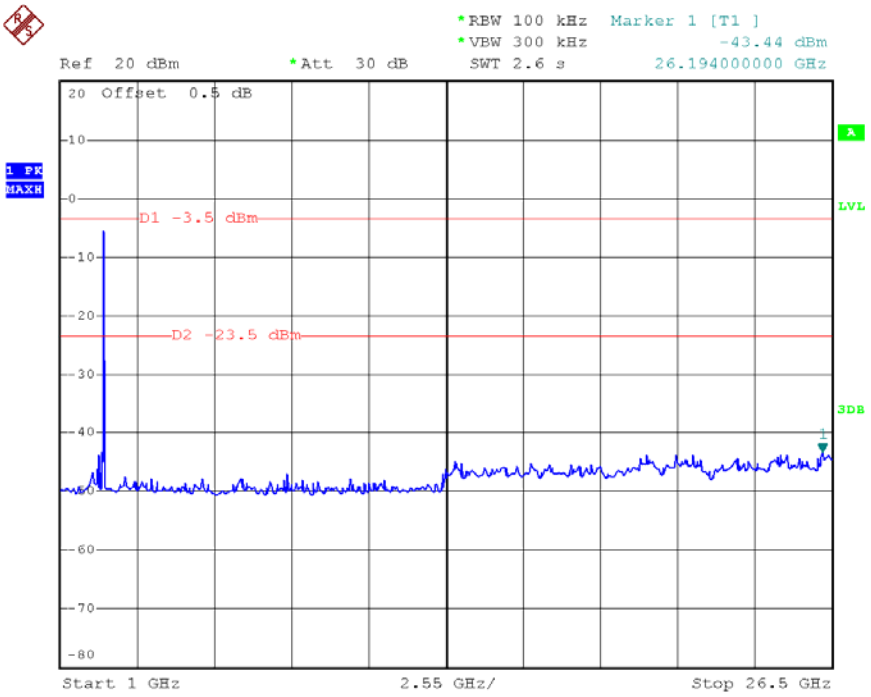
Date: 3.SEP.2013 20:01:32

TX HT40 mode CH09 (30M~1000MHz)



Date: 3.SEP.2013 20:06:30

TX HT40 mode CH09 (1000MHz~10th Harmonic)



Date: 3.SEP.2013 20:07:04

8. POWER SPECTRAL DENSITY TEST

8.1 Applied procedures / limit

FCC Part15 (15.247) , Subpart C				
Section	Test Item	Limit	Frequency Range (MHz)	Result
15.247(e)	Power Spectral Density	8 dBm (in any 3KHz)	2400-2483.5	PASS

8.1.1 MEASUREMENT INSTRUMENTS LIST

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last Calibration	Next Calibration
1	Spectrum Analyzer	R&S	FSP_40	100185	Nov. 17.2012	Nov. 16.2013

Remark: “N/A” denotes no model name, serial no. or calibration specified.
All calibration period of equipment list is one year.

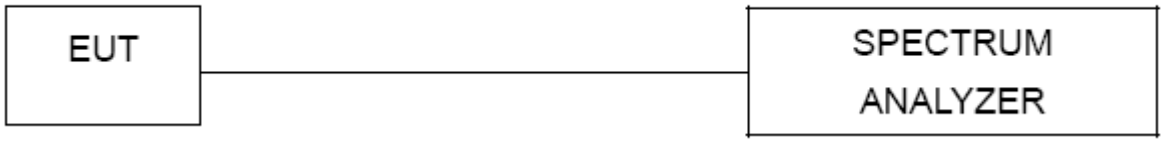
8.1.2 TEST PROCEDURE

a. The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram below,
b. Spectrum Setting : RBW=3KHz, VBW=10 KHz, Sweep time = Auto.

8.1.3 DEVIATION FROM STANDARD

No deviation.

8.1.4 TEST SETUP



8.1.5 EUT OPERATION CONDITIONS

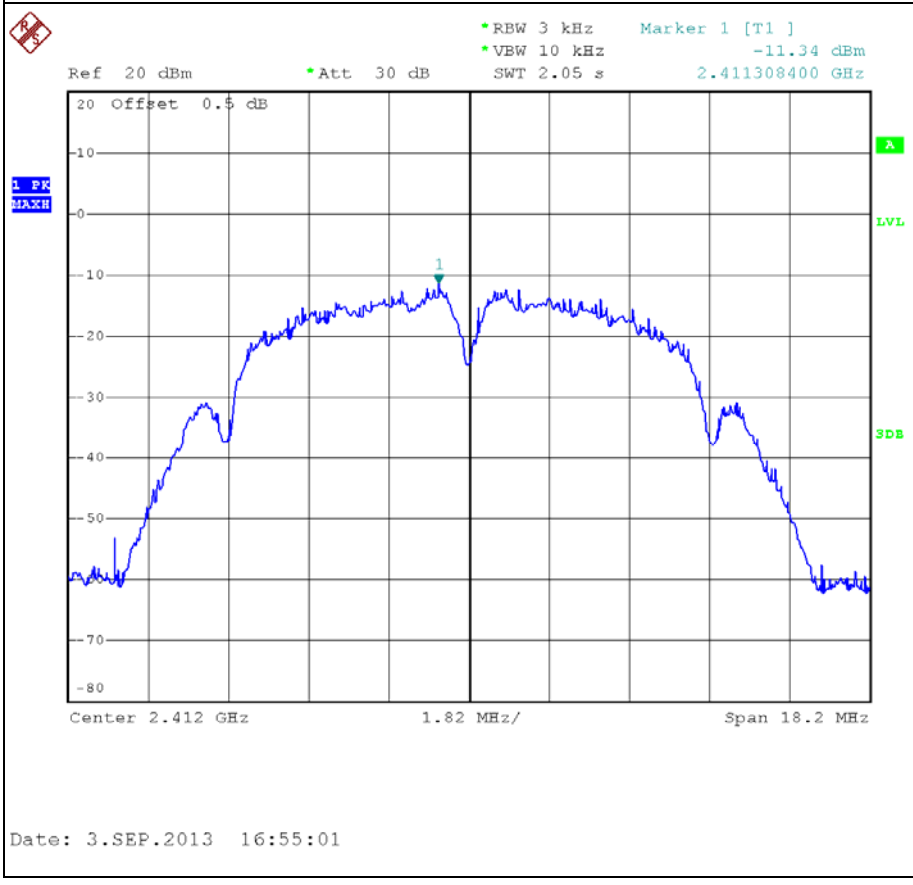
The EUT tested system was configured as the statements of 4.1.6 Unless otherwise a special operating condition is specified in the follows during the testing.

8.1.6 TEST RESULTS

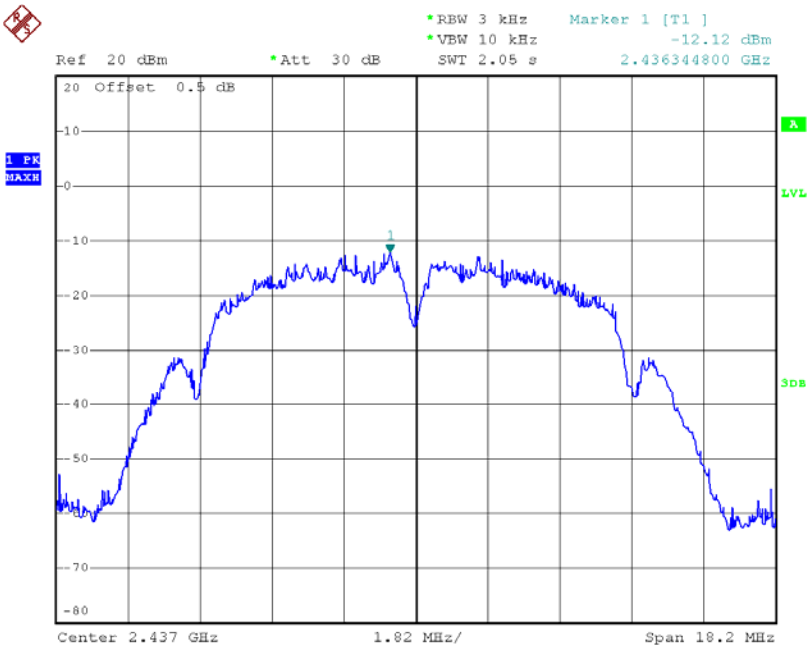
EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX B MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-11.34	8
CH06	2437 MHz	-12.12	8
CH11	2462 MHz	-9.77	8

TX CH01

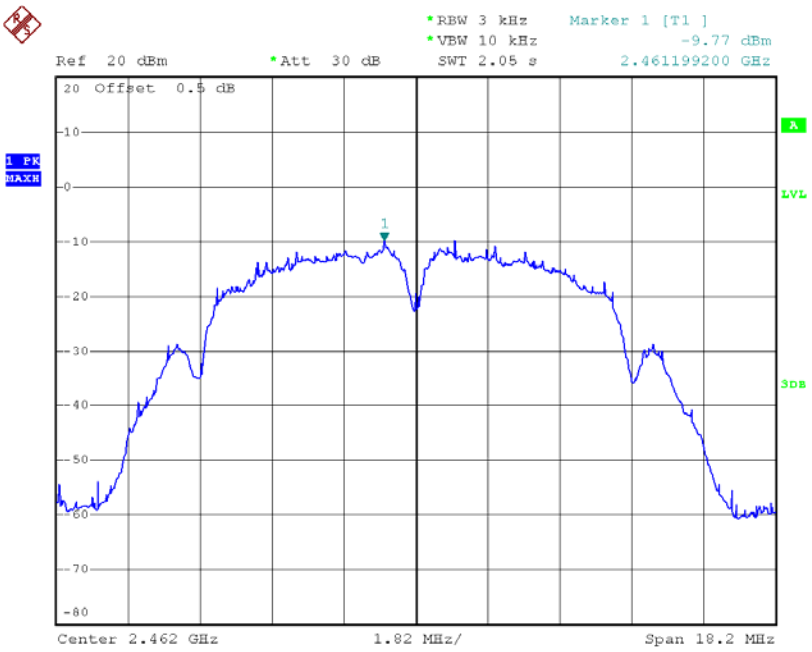


TX CH06



Date: 3.SEP.2013 16:58:28

TX CH11

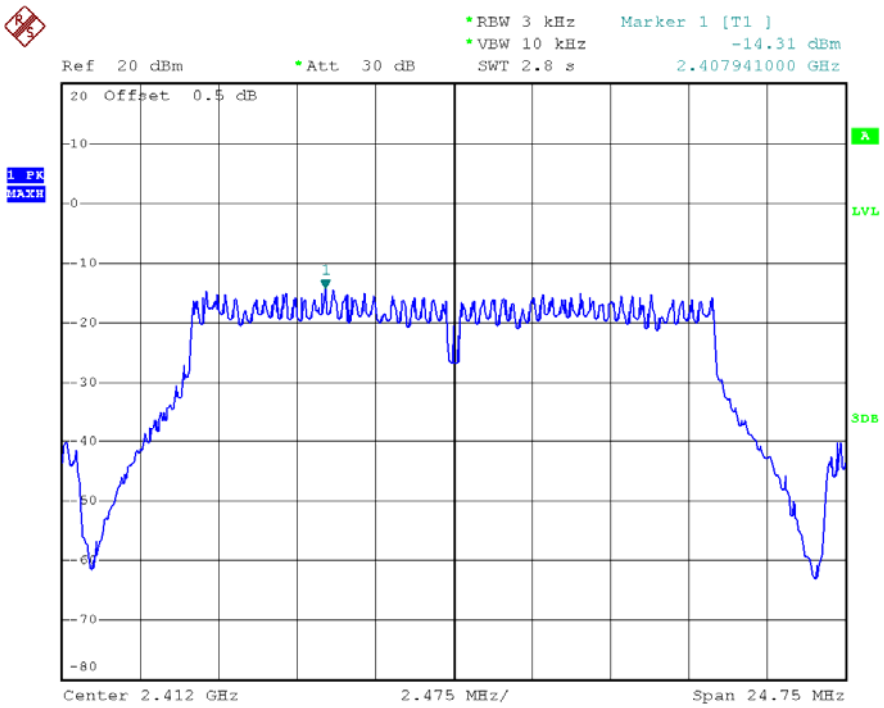


Date: 3.SEP.2013 17:21:15

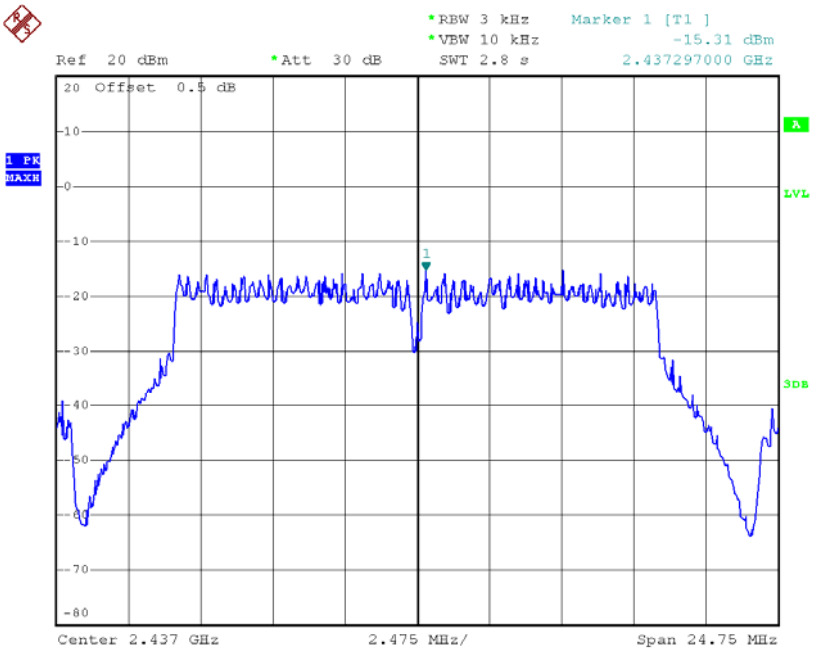
EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX G MODE /CH01, CH06, CH11		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-14.31	8
CH06	2437 MHz	-15.31	8
CH11	2462 MHz	-14.34	8

TX CH01

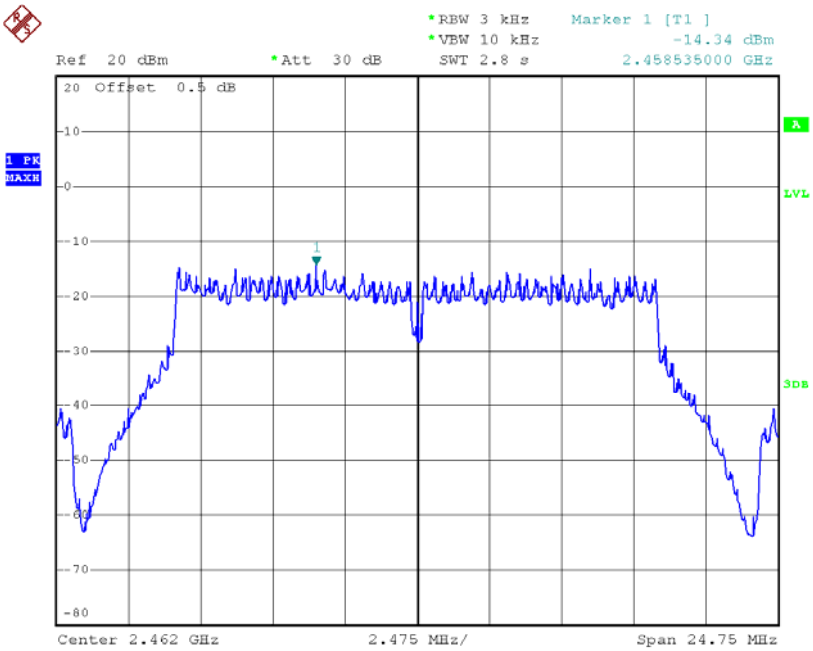


TX CH06



Date: 3.SEP.2013 18:16:03

TX CH11

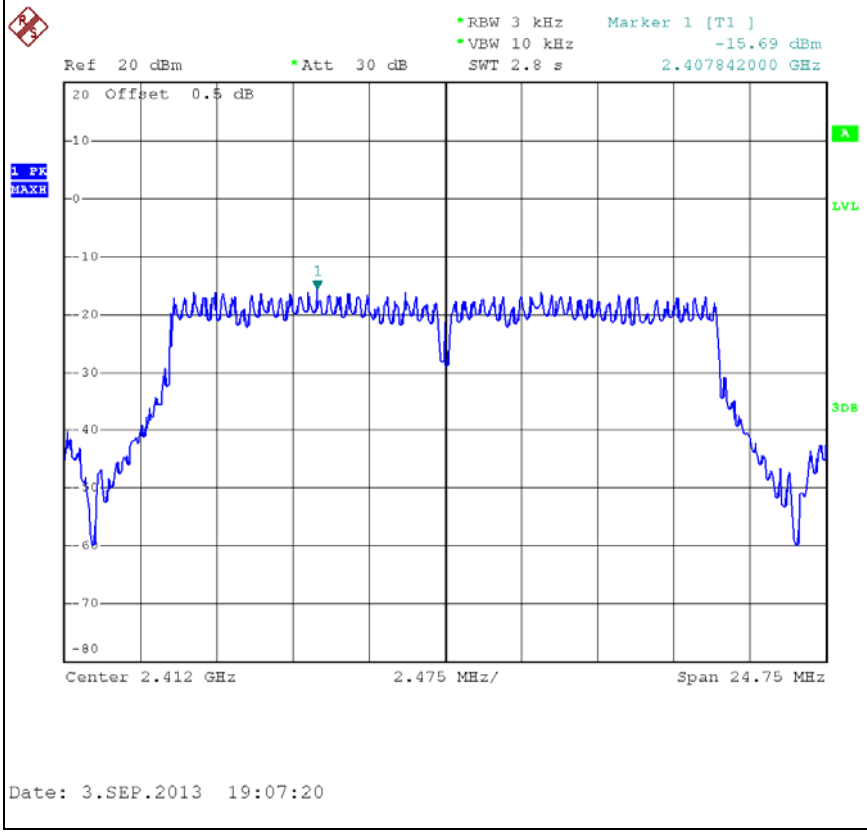


Date: 3.SEP.2013 18:58:42

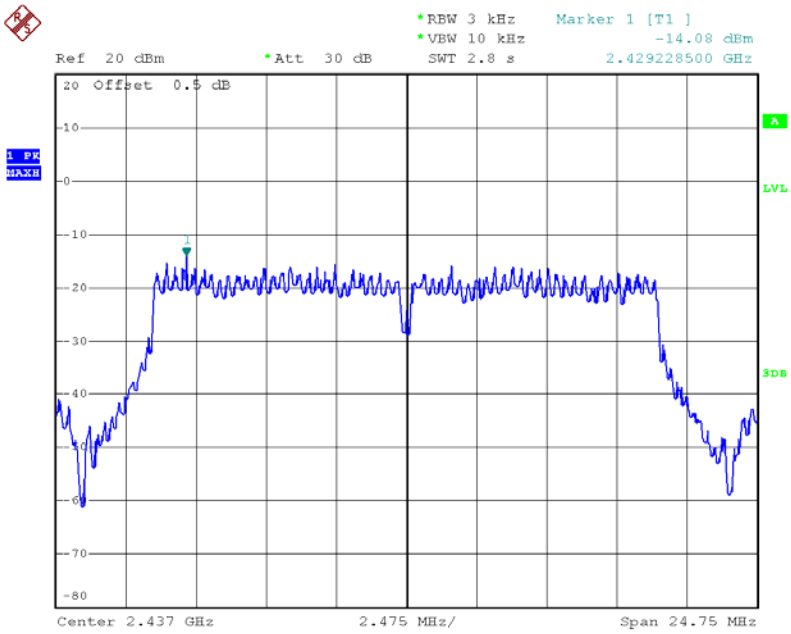
EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-20MHz /CH01, CH06, CH11-ANT 0		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-15.69	8
CH06	2437 MHz	-14.08	8
CH11	2462 MHz	-16.11	8

TX CH01

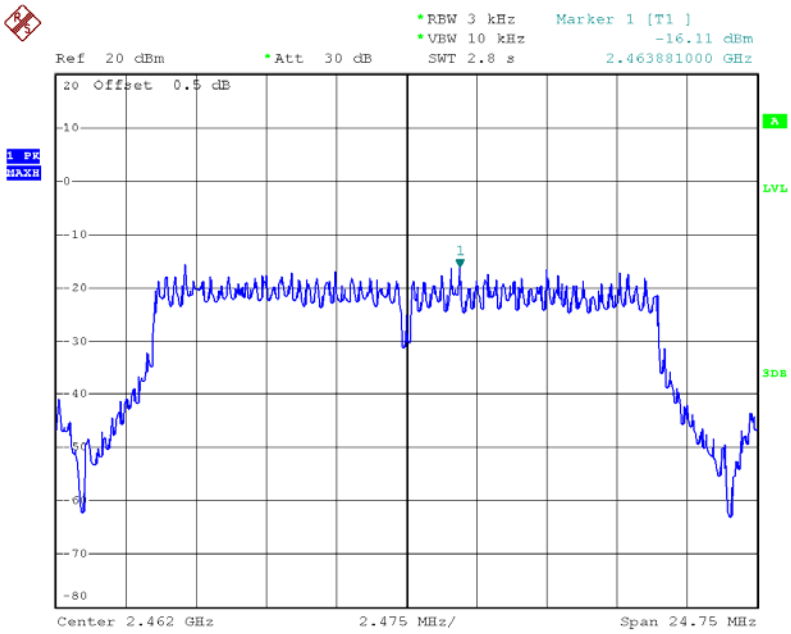


TX CH06



Date: 3.SEP.2013 19:13:32

TX CH11

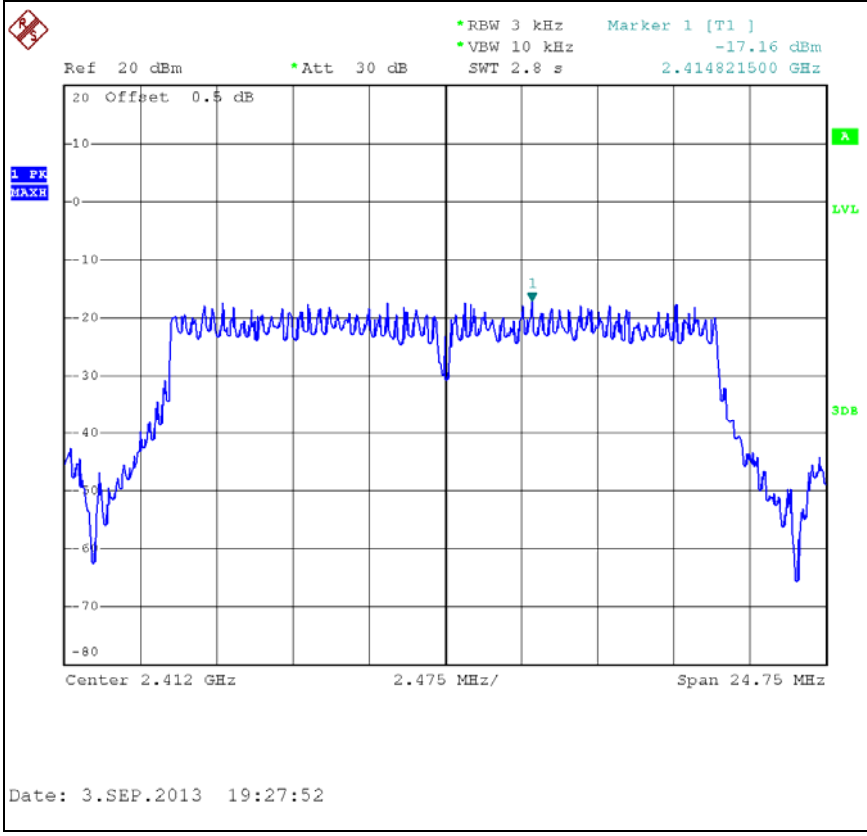


Date: 3.SEP.2013 19:17:25

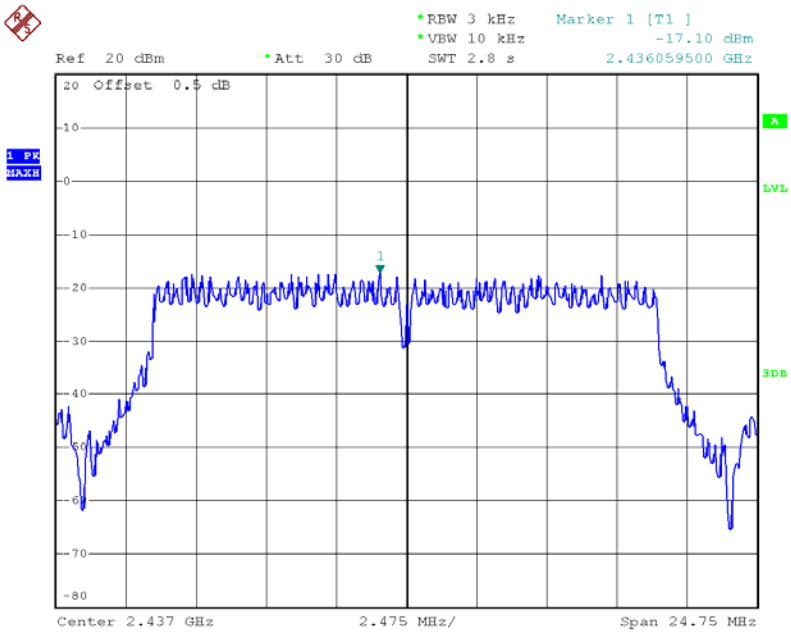
EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-20MHz /CH01, CH06, CH11-ANT 1		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-17.16	8
CH06	2437 MHz	-17.10	8
CH11	2462 MHz	-16.46	8

TX CH01

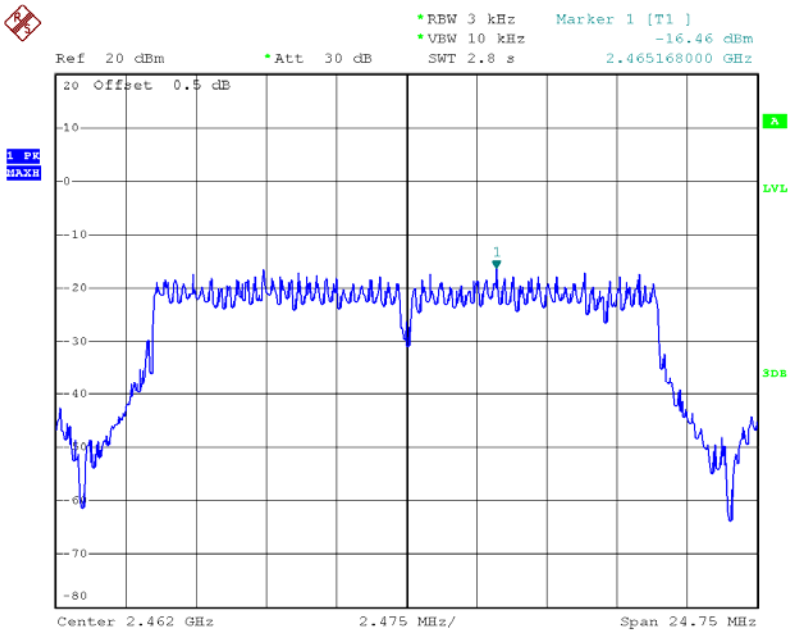


TX CH06



Date: 3.SEP.2013 19:25:45

TX CH11

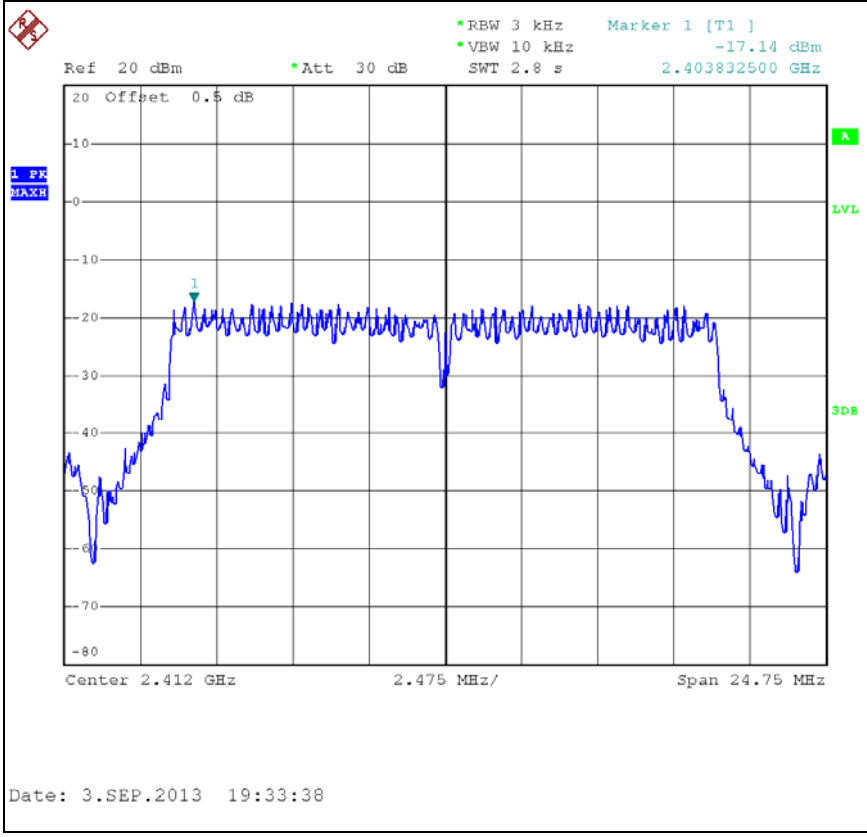


Date: 3.SEP.2013 19:24:10

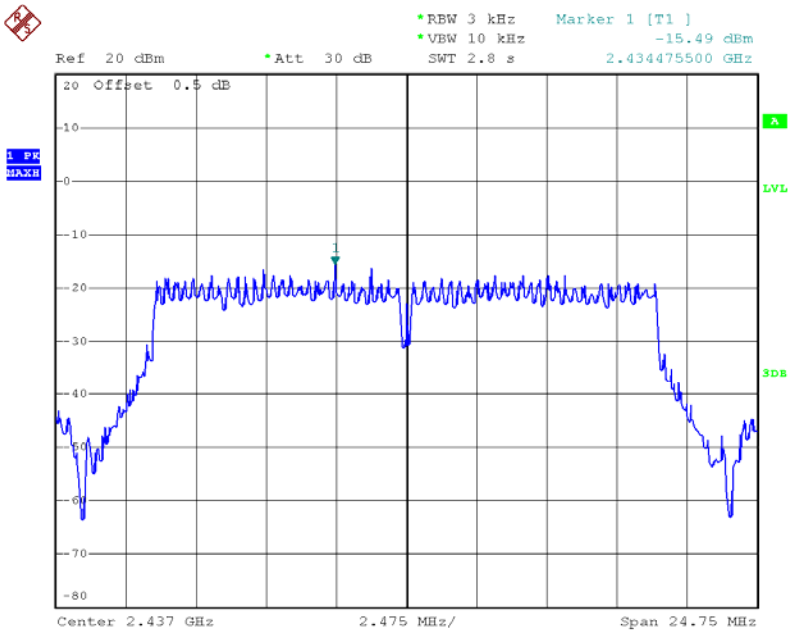
EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-20MHz /CH01, CH06, CH11-ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-17.14	8
CH06	2437 MHz	-15.49	8
CH11	2462 MHz	-13.44	8

TX CH01

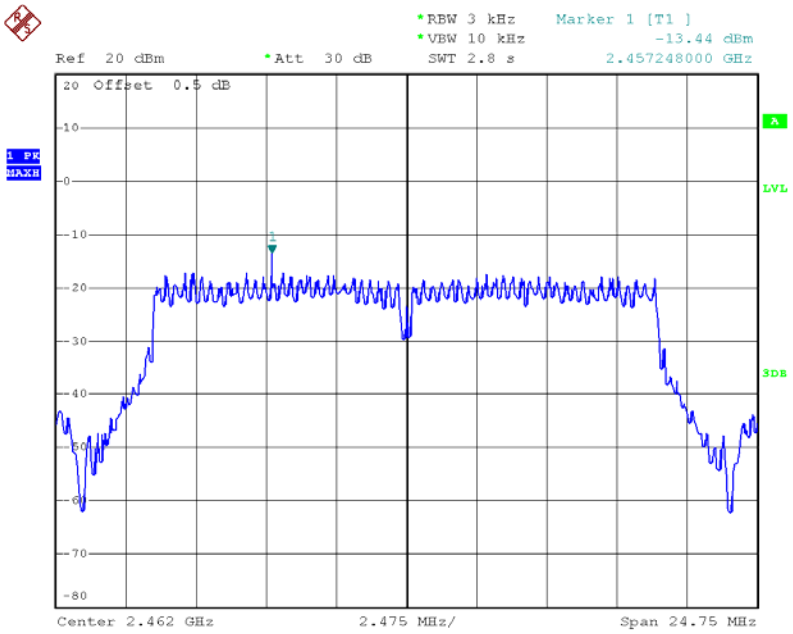


TX CH06



Date: 3.SEP.2013 19:41:54

TX CH11



Date: 3.SEP.2013 19:45:07

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-20MHz /CH01, CH06, CH11-ANT 0+ANT 1+ANT 2		

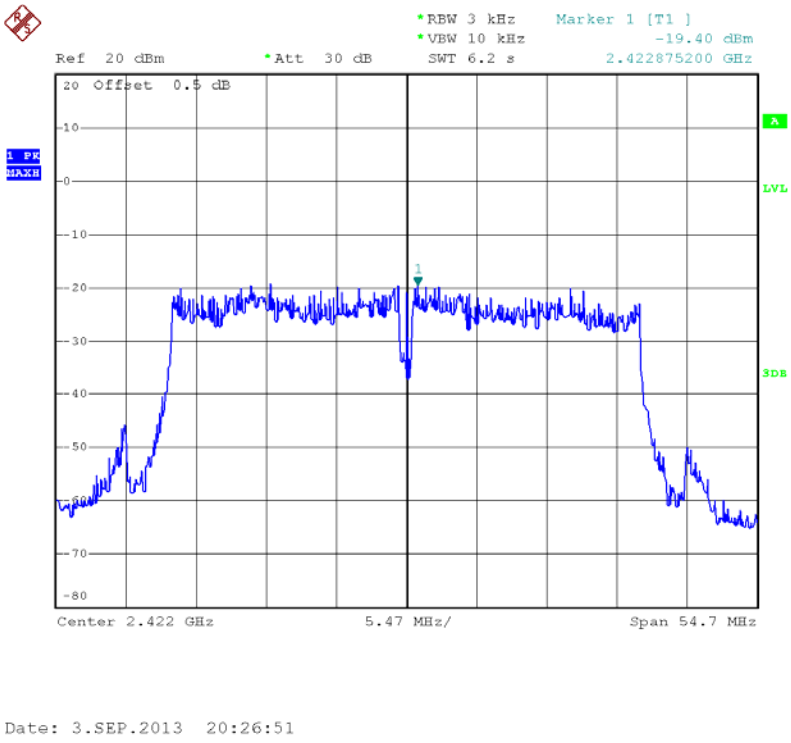
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH01	2412 MHz	-11.84	8
CH06	2437 MHz	-10.61	8
CH11	2462 MHz	-10.34	8

Note: The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and three receivers (3T3R).all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=5.

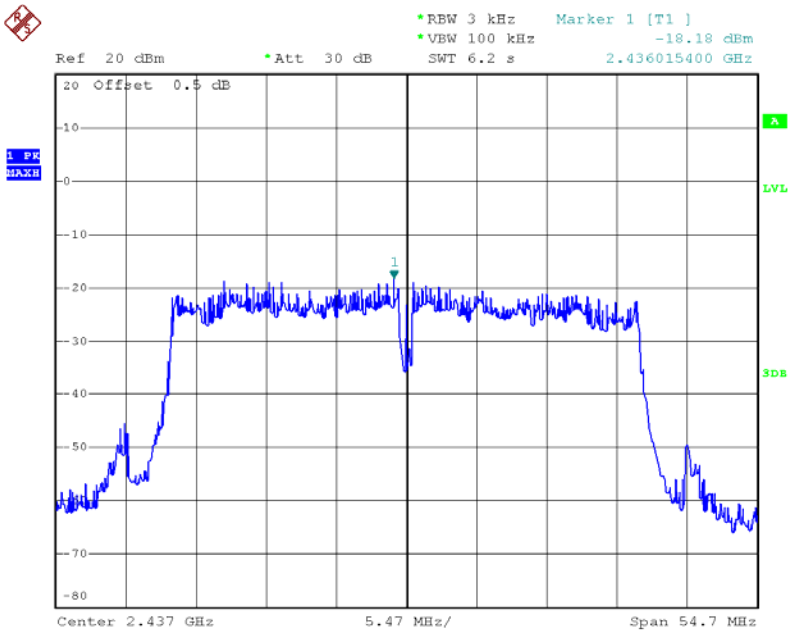
EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-40MHz /CH03, CH06, CH09-ANT 0		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-19.40	8
CH06	2437 MHz	-18.18	8
CH09	2452 MHz	-18.85	8

TX CH03

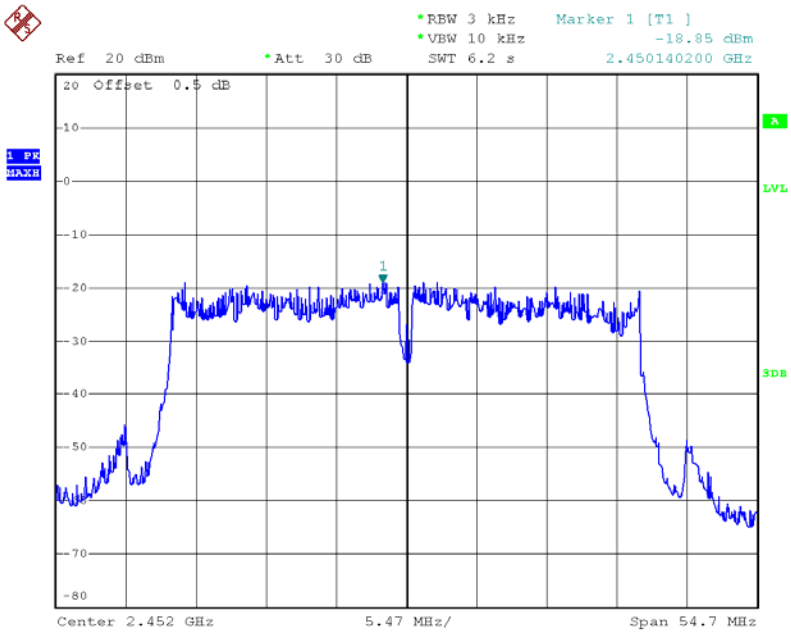


TX CH06



Date: 3.SEP.2013 20:29:53

TX CH09

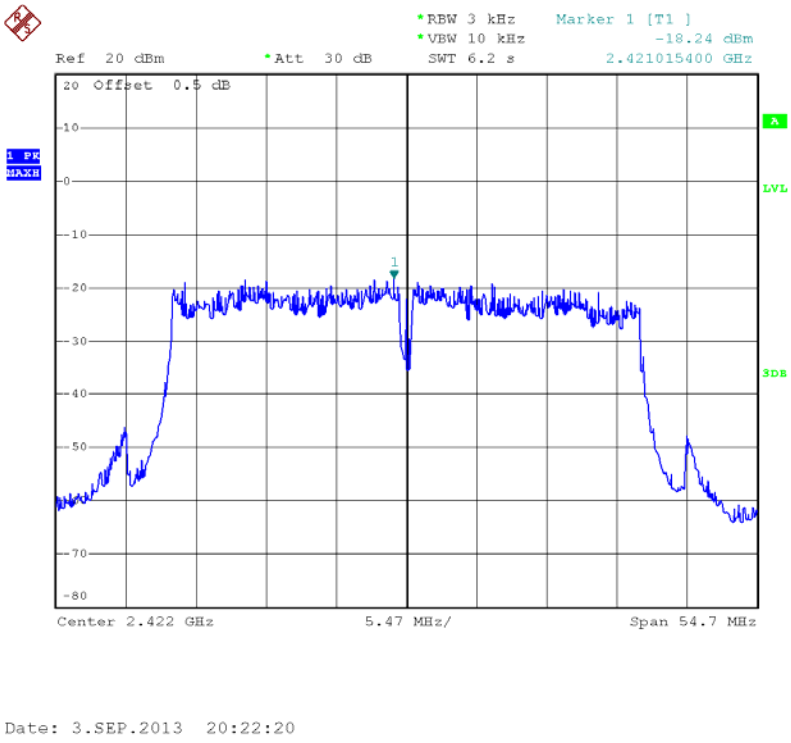


Date: 3.SEP.2013 20:32:22

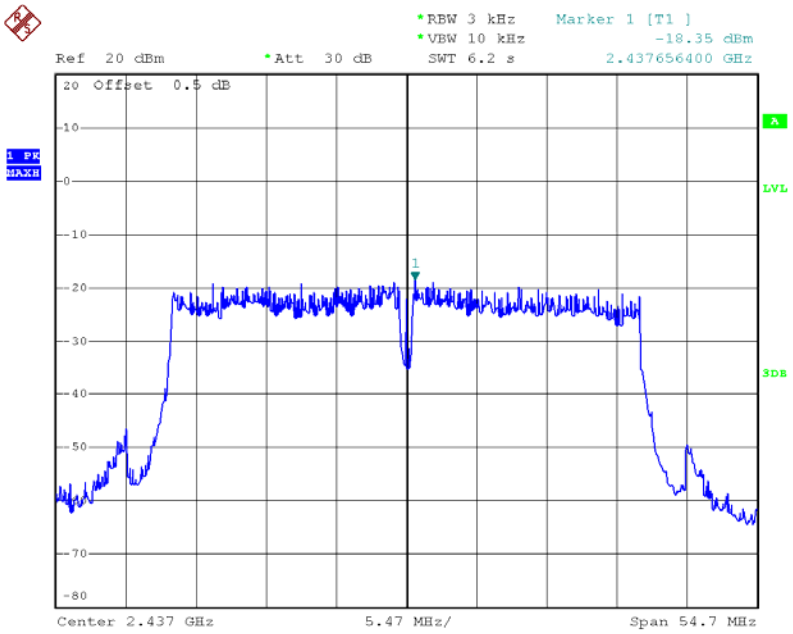
EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-40MHz /CH03, CH06, CH09-ANT 1		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-18.24	8
CH06	2437 MHz	-18.35	8
CH09	2452 MHz	-18.51	8

TX CH03

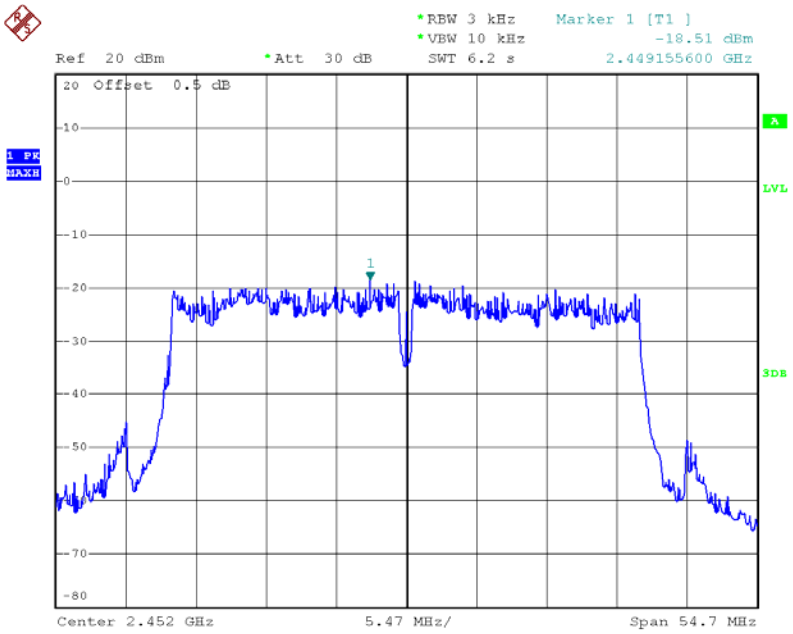


TX CH06



Date: 3.SEP.2013 20:18:25

TX CH09

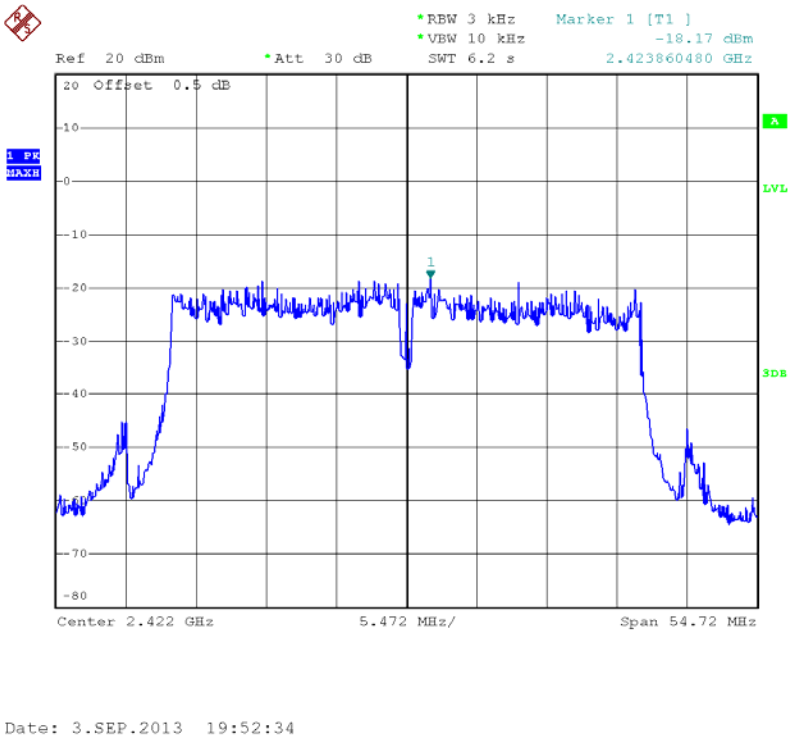


Date: 3.SEP.2013 20:10:40

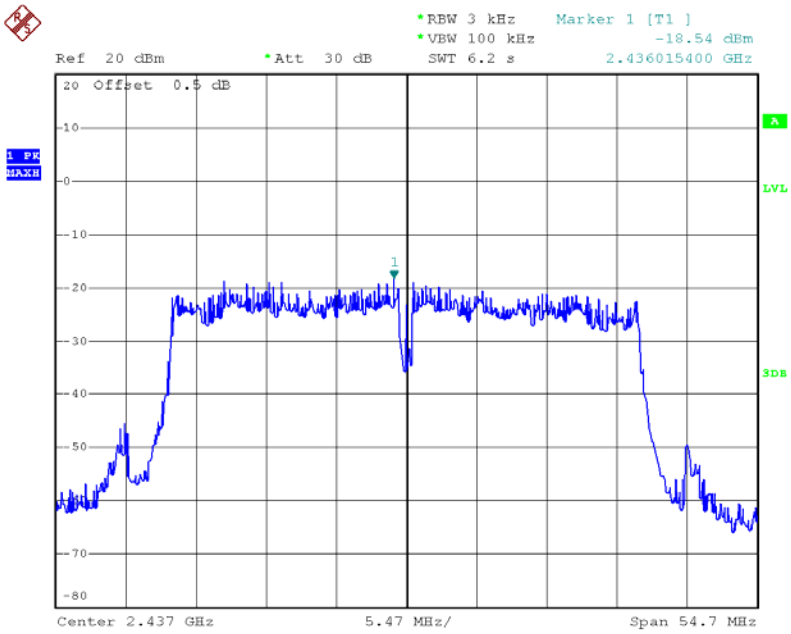
EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-40MHz /CH03, CH06, CH09-ANT 2		

Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-18.17	8
CH06	2437 MHz	-18.54	8
CH09	2452 MHz	-18.67	8

TX CH03

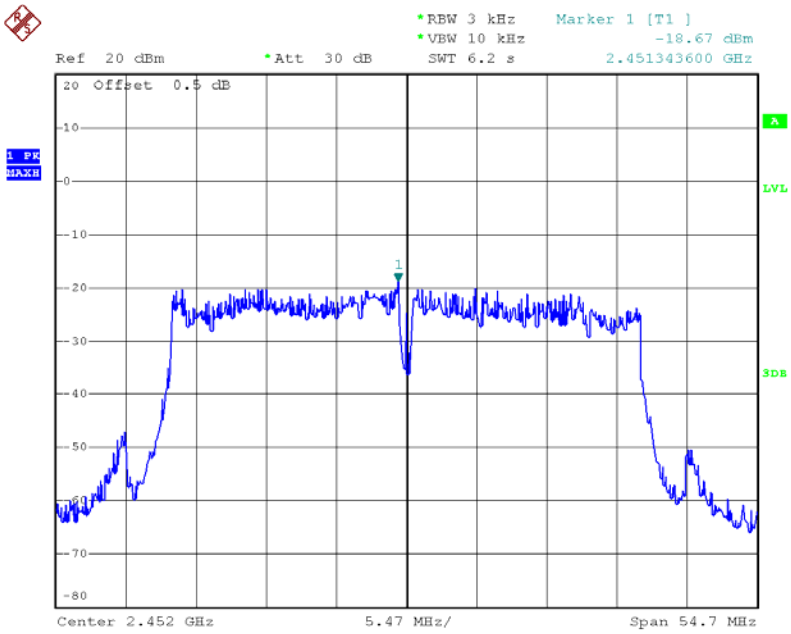


TX CH06



Date: 3.SEP.2013 20:00:21

TX CH09



Date: 3.SEP.2013 20:04:10

EUT：	Wireless N450 Gigabit Router	Model Name ：	F452
Temperature：	24 ℃	Relative Humidity：	60 %
Pressure：	1016 hPa	Test Voltage ：	AC 120V/60Hz
Test Mode ：	TX N MODE-40MHz /CH03, CH06, CH09-ANT 0+ANT 1+ANT 2		

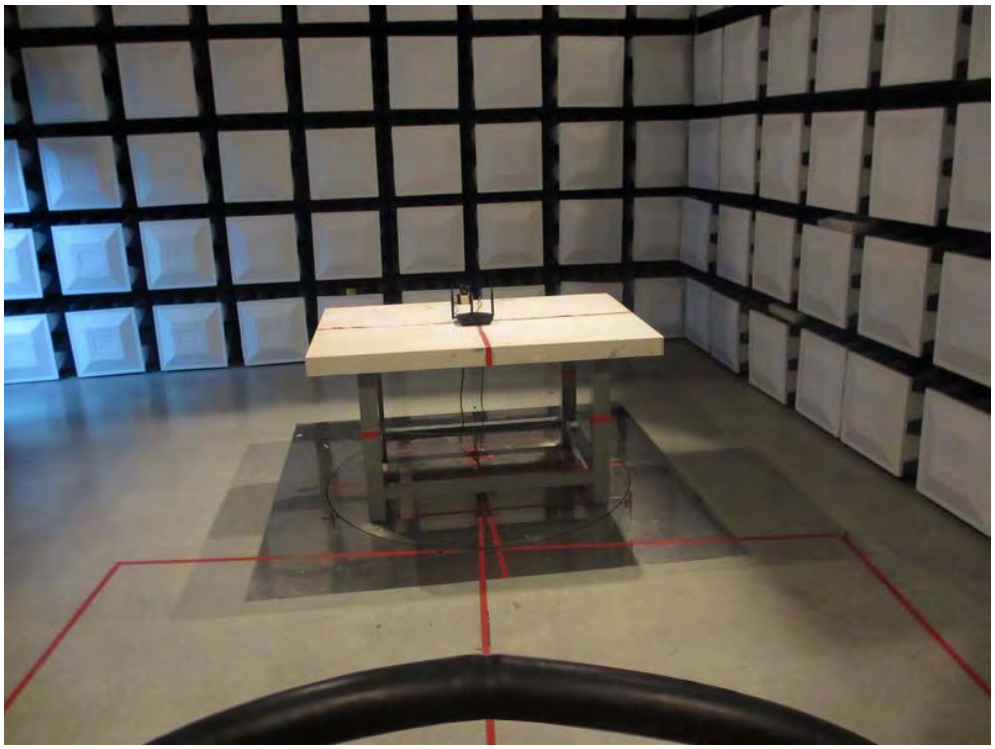
Test Channel	Frequency (MHz)	Power Density (dBm)	LIMIT (dBm)
CH03	2422 MHz	-13.84	8
CH06	2437 MHz	-13.55	8
CH09	2452 MHz	-13.90	8

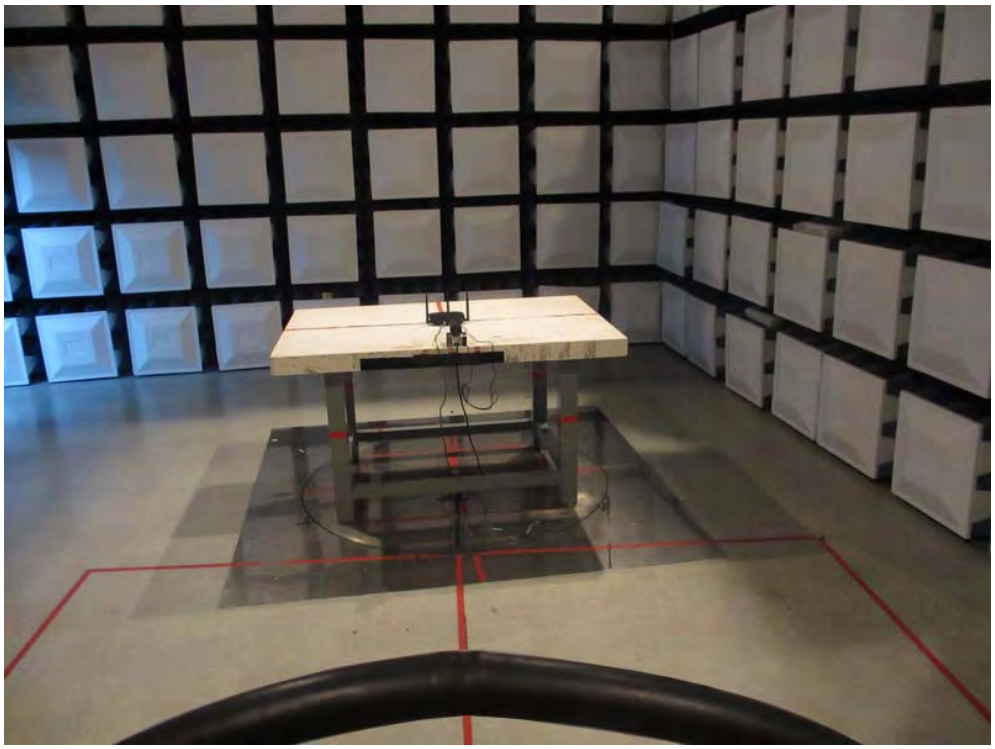
Note: The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and three receivers (3T3R).all transmit signals are completely uncorrelated, then, Direction gain = G_{ANT}, that is Directional gain=5.

9. EUT TEST PHOTO

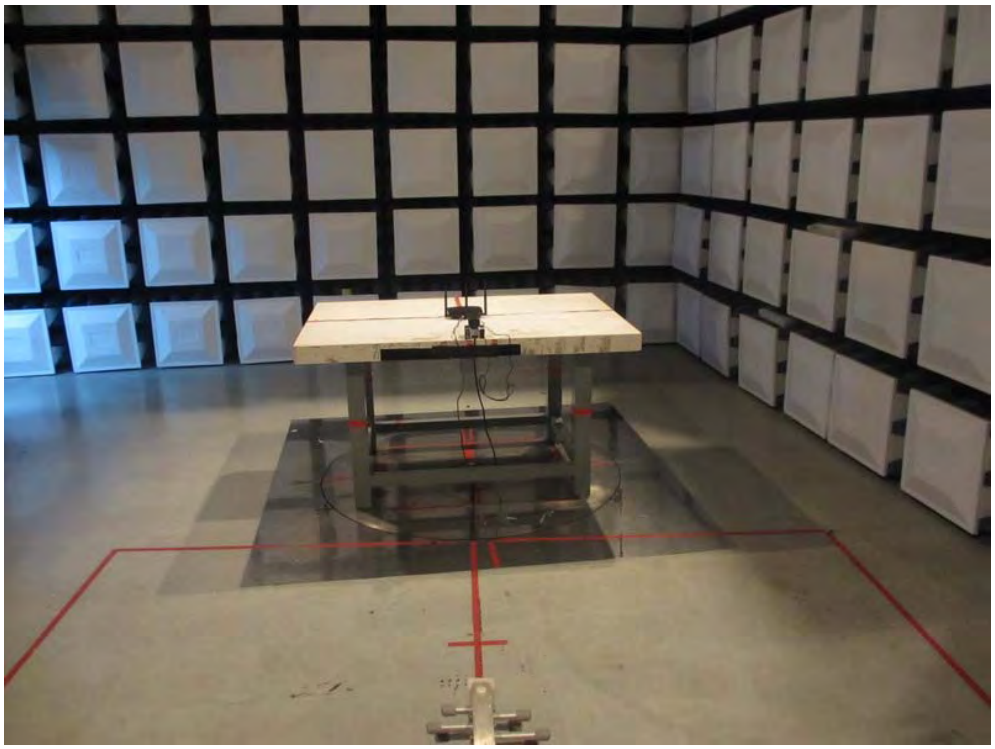
Conducted Measurement Photos

Radiated Measurement Photos
9KHz-30MHz





Radiated Measurement Photos
30MHz -1000MHz



Radiated Measurement Photos
Above 1000MHz